

27th May 2024

To, IRO MoEF&CC, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Gandhi Nagar A wing- 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar-382010, Gandhinagar, Gujarat

Sub: EC compliance report for Environmental Clearance of M/S. Birla Copper Asoj Pvt Ltd for setting up of manufacturing plant of metallurgical Industries at survey no. 21, village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat, India 391510.

Dear Sir,

We M/S. Birla Copper Asoj Pvt Ltd has received Environmental Clearance for setting up of manufacturing plant of metallurgical Industries at survey no. 21, village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat, India 391510 from SEIAA Gujarat vide Environmental Clearance No.: SEIAA/GUJ/EC/3(a)/1609/2023 Dated: 13<sup>th</sup> Dec 2023

As a part of EC condition herewith we are submitting EC compliance report From December 2023 to March 2024 for your kind consideration.

Thanking You,

Yours Faithfully

Authorized Signatory

# ASAV P. GADHVI MEMBER SECRETARY SEIAA (GUJARAT)



# GOVERNMENT OF INDIA MOEF & CC STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

No. SEIAA/GUJ/EC/3(a)/ 1609 /2023

Date: 1 3 DEC 2023

By R P A D

**Time Limit** 

Sub: Environment Clearance to M/s. Birla copper Asoj Pvt. Ltd for setting up of manufacturing plant of 'Metallurgical industries' at Survey No 21, Village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat,India, 391510. In Category 3(a) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIA/GJ/IND1/439857/2023.

Dear Sir,

This has reference to your application along with EIA report dated 22/08/2023 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance to M/s. Birla copper Asoj Pvt. Ltd for setting up of manufacturing plant of 'Metallurgical industries' at Survey No 21, Village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat,India, 391510. It is a proposed unit for manufacturing following products, which falls in the category - 3(a) of the schedule of the EIA Notification-2006:

S. No.	Name of Product	CAS No.	Quantity	End use of Product
1	Copper Rod	7440-50-8	19000	General applications
2	ABC (annealed bare conductor) Wires	7440-50-8	5000	within the electrical equipment
Total	(KL/M)		24000	

#### # Brief Note of Product Profile:

- 1. No of Manufacturing Plants: 01
- 2. Brief Note regarding number of Products to be manufactured considering plant capacity: Proposed plant will be utilized for the manufacturing of the list of the products mentioned in the product profile.

The project activity is covered in 3(a) and is of 'B1' Category, for regularizing of exiting product of "Metallurgical industries" of Copper Red & ABC (Annealed bare Conductor) wire as per SEAC recommendation and MoEF & CC notification dated 20<sup>th</sup> July 2022 public hearing is exempted.

The SEAC, Gujarat vide their letter dated 24/11/2023 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 27/10/2023. The proposal was considered by SEIAA, Gujarat in its meeting held on 04/12/2023 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions.

### A.CONDITIONS:

### A.1SPECIFIC CONDITION:

- 1. PP shall provide total Green belt area of 33.84 % as per their submission.
- 2. Proponent shall obtain Fire permission from competent authority.
- 3. PP shall take safety measures for workers against heat shocks, burns, flashing of fire and handling of heavy equipments and heavy items of steel etc.
- 4. PP shall comply with Emergency measures and preparedness action for any accident.
- 5. PP shall prepare on site emergency plan with relevant details.
- 6. All the issues raised during public hearing and commitments made by the Project proponent shall be complied in letter and spirit.

National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.

8. Unit shall have to adhere to the prevailing area specific policies of GPCB with respect to the discharge of pollutants, and shall carry out the project development in accordance & consistence with the same.

The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.

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- 10. All measures shall be taken to avoid ground water and soil contamination within premises.
- 11. PP shall adopt renewable energy like installation of solar panel or solar light etc. for proposed project.
- 12. PP shall install secondary fume extraction at induction furnace area, as per details submitted by PP.
- 13. Unit shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable].

### A. 2 WATER:

- 14. Total water requirement for the project shall not exceed 328.5 KLD. Unit shall reuse43.5 KLD of treated effluent within premises. Hence, fresh water requirement shall not exceed 285 KLD and it shall be met through borewell only. Prior permission from concerned authority shall be obtained for procurement of water.
- 15. The industrial effluent generation from the project shall not exceed 43.5 KLD.
- 16. Management of Industrial effluent shall be as under:
  - 37 KLD of effluent generated from RO reject shall be re-used for gardening purposes within premises only after conforming to the prescribed limit by GPCB.
- 17. Domestic wastewater generation shall not exceed 6.5 KL/day for proposed project and it shall be treated in STP.It shall not be disposed off into soak pit. Treated sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.
- 18. During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.
- 19. Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.
- 20. Unit shall provide STP and ETP with adequate capacity.
- 21. The unit shall provide metering facility at the inlet and outlet of ETP and maintain records for the same.
- 22. Proper logbooks of ETP; reuse/ recycle of treated/ untreated effluent; chemical consumption in effluent treatment; quantity & quality of treated effluent; power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.

### A.3AIR:

23. Unit shall not exceed fuel consumption for Shaft furnace and D G Set as mentioned below.

Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)	Remarks	
1	Shaft furnace – 100 MT stacking capacity	32	Natural gas	1458 m <sup>3</sup> /hr	PM	Adequate Stack Height Natural gas is used as a fuel.	- 6	S. S. S.
2	DG Set 500 KVA	11	Diesel	100 Ltr/Hrs	PM, SOx, NOx	DG set is used for emergency power backup only.		The same of the sa

- 24. PP shall use approved fuels only as fuel in Shaft furnace and D G Set.
- 25. Unit shall provide adequate APCM with flue gas generation sources to achieve the norms prescribed by GPCB.
- 26. There shall be no process gas emission.
- 27. The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety& Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.
  - Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.
  - Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.
  - > A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.
- 28. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.
- 29. Regular monitoring of ground level concentration of PM10, PM2.5, SO2, NOx and VOCs shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

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## A.4 SOLID / HAZARDOUS WASTE:

30. All the hazardous/ solid waste management shall be taken care as mentioned below.

Sr. no.	Type / Name of Hazardous waste	Specific Source of generation (Name of the Activity,	Category and Schedule	Quantity	Management of HW
		Product etc.)	as per HW Rules.		
1	Used Spent oil	Process	5.1 Schedule- 1	6.00	Generation, Collection, Storage, Transportation and Disposal by selling to registered/authorized refiner having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
2	Oil contaminated cotton & Cloth waste	Used from operation & maintenance	5.2 Schedule- 1	6.00	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF for co- processing/incineration having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
3	Empty Containers & barrels	Lubricating grease & Oil, Cleaning Oil	33.1 Schedule- 1	10.00	Generation, Collection, Storage, Transportation and Disposal by selling to registered/authorized re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
4	Emulsion	Process	5.2 Schedule- 1	200.00	Generation, Collection, Storage, Transportation and Disposal to approved re-cyclers having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
5	Waste Graphite Solution	Process	B2010	75.00	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF for land filling having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
6	Used Resins	Process	35.2	1.00	Generation, Collection,

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			Schedule- 1		Storage, Transportation and Disposal to common TSDF site/co- processing facility for land filling having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
7	Copper Oxide Mill Scale	Process	3 Schedule- IV	325.00	Generation, Collection, Storage, Transportation and Disposal to registered re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
8	Copper reverts cakes and Residue	Process	4 schedule 1	3.00	Generation, Collection, Storage, Transportation and Disposal to registered re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
9	Slag From Copper Dross	Furnace	2 Schedule -1	115.00	Generation, Collection, Storage, Transportation and Disposal to registered re-cycler having valid CCA of GPCB by use of GPS enable vehicle and XGN generated manifest.
10	Used membrane/filter cloth and bags	Process	Z-Z37	0.40	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF having valid CCA of GPCB by use of GPS enable vehicle and XGN generated manifest.
11	Used Insulation	Process	X-X02	3.80	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF having valid CCA of GPCB by use of GPS enable vehicle and XGN generated manifest.

<sup>31.</sup> Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. (if applicable)

<sup>32.</sup> Unit shall explore the possibilities for environment friendly methods like co-processing of hazardous waste for disposal of Incinerable & land fillable wastes before sending to CHWIF & TSDF sites respectively. (if applicable)

<sup>33.</sup> The project proponent has to obtain membership of TSDF site & CHWIF before obtaining CTO of GPCB. (if applicable)

34. Entire quantity of process slag generated from manufacturing plant shall be either used for land filling or sold to actual end users and record shall be maintained.

#### A. 50THER:

35. The project proponent shall carry out the activities of amount of Rs. 3.5 Crores as mentioned above (Solar street lights for self-sustaining Green technology at Paldi, Abhrampura, Panchdevla, Waste Management Service at Asoi, Paldi, Sanitation (Toilet unit) for Individual and Public at Hansapura, Pratappura, Khandiwada, Bodidra, Abhrampura, Ambatalay, Drainage line/Water connection line at Asoj, Adiran, Khandiwada, Sinhapura, Rooftop rain water harvesting/Septic tank at Adiran, Tree Plantation/Kitchen garden/Medicine garden/Flower pots at Panchdevla, Garden development with lawn cleaning and providing playground equipment at Asoj, Sarnej and Khandivala, Rooftop Solar panel for Anganwadi, Primary schools and health center at Asoj, Adiran, Sinhapura, Water tank (50,000 litres) at Paldi, Bio gas plant at Hansapura, Drilling and providing pipe for Bore well of diameter "8" at Bodidra, Sinhapura, Supply and Installation of Payor blocks at Abhrampura, Adiran, Khandiwada, Sinhapura, Drinking water facility RO water purifier/filter at School/Anganwadi at Hansapura, Shankarpura, Sinhapura Abhrampura, Khandiwada, Uniform/Textbooks/ Sports uniform/Toys & Posters/Sports equipment/Stationary at Pratappura, Panchdevla, Khandiwada, Bodidra, Paldi, Abhrampura, Adiran, Ambatalav, Sinhapura, Reconstruction of Panchayat building/Anganwadi/School/PHC & Community hall at Asoj, Hansapura, Pratappura, Bodidra, Abrahampura, Sinhapura, Shankarpura, Paldi, Panchdevla, Adiran, Ambatalav, Providing computers/Printer for Computer lab at Asoj,Pratappura,Shankarpura, Paldi, Panchdevla,Khandiwada, Sinhapura, Hansapura, Smart class/ Projector/ Mic system/CCTV Camera at Asoj, Panchdevla, Bodidra, Shed for MDM at Bod Asoj, Entry gate of Village at Hansapura, Providing Sports equipment in school at Hansapura, Paldi, Ambatalav idra, Khandiwada, Ambatalav, Tables/Chairs/Cupboard/Benches/Desk/Mats/Utensils/Fan at Asoj, Pratappura, Bodidra, Hansapura, Adiran, Setting of Library with books at Asoj, Paldi, Gymnasium at Asoj, Providing ambulance at PHC Asoj, Change/Reconstruction of compound wall at Pratappura, Bodidra, Paldi, Sinhapura, Adiran, RCC road at Adiran, Sinhapura, Conducting Health check-up camps at Adiran, Sinhapura, One day picnic for school children at Asoj and Colour paint in Anganwadi/School/PHC/Panchay at Ambatalay, Khandiwada) proposed under CER and it shall be part of the Environment Management Plan (EMP) as per the MoEF&CC's OM no. F. No. 22-65/2017-IA.III dated 30.09.2020. This shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to the District Collector. The monitoring report shall be posted on the website of the project proponent.

As proposed, at least Rs. 3 lakhs shall be allocated for the conservation plan Schedule- I species. (MoEF&CC)

All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by M/s. Kadam Environment Consultantsand submitted by the project proponent and continuents made during presentation before SEAC and proposed In the EIA report shall be strictly adhered to in letter and spirit.

### B.GENERAL CONDITIONS: B.1 CONSTRUCTION PHASE:

- 38. Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.
- 39. Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.
- 40. All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
- 41. First Aid Box shall be made readily available in adequate quantity at all the times.
- 42. The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local bye-laws of concern authority shall be complied in letter and spirit.
- 43. Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
- 44. Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.
- 45. Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.
- 46. All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.
- 47. Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.

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- 48. Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete [RMC] and lead free paints in the project.
- 49. Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.
- 50. "Wind breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided. Individual building within the project site shall also be provided with barricades.
- 51. "No uncovered vehicles carrying construction material and waste shall be permitted."
- 52. "No loose soil or sand or construction & demolition waste or any other construction material that cause dust shall be left uncovered. Uniform piling and proper storage of sand to avoid fugitive emissions shall be ensured."
- 53. Roads leading to or at construction site must be paved and blacktopped (i.e. metallic roads).
- 54. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
- 55. Dust mitigation measure shall be displayed prominently at the construction site for easy public viewing.
- 56. Grinding and cutting of building materials in open area shall be prohibited.
- 57. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
- 58. Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site. (If applicable).

### **B.2 OPERATION PHASE:**

### **B.2.1 WATER:**

- 59. The water meter shall be installed and records of daily and monthly water consumption shall be maintained.
- 60. All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The unit shall continuously strive to reduce, recycle and reuse the treated effluent.

#### **B.2.2 AIR:**

- 61. In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & it's APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
- 62. Acoustic enclosure shall be provided to the DG sets (If applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.
- 63. Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for the gas emission/Process gas emission.
- 64. Flue gas emission & Process gas emission (If any) shall conform to the standards prescribed by th GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.
- 65. All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.

#### B.2.3 HAZARDOUS/SOLID WASTE:

- 66. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.
- 67. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
- 68. The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)
- 69. Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act. 1988, and rules made there under.
- 70. The design of the Trucks/tankers shall be such that there is no spillage during transportation
- 71. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
- 72. Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.

#### B.2.4 SAFETY:

- 73. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.
- 74. Sufficient no. of fire extinguishers shall be provided near the plant and storage area.
- 75. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.
- 76. Only flame proof electrical fittings shall be provided in the plant premises.
- 77. Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.
- 78. Personal Protective Equipments like heat resistant suit shall be provided to workers and its usage shall be ensured and

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- supervised.
- 79. First Aid Box shall be made readily available in adequate quantity.
- 80. Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
- 81. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
- 82. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.
- 83. Necessary permissions from various statutory authorities like Factory Inspectorate and others shall be obtained prior to commissioning of the project if applicable.
- 84. The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963
- 85. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.
- 86. Main entry and exit shall be separate and clearly marked in the facility.
- 87. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.
- 88. Storage of flammable chemicals shall be sufficiently away from the production area.
- 89. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.
- 90. All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.
- 91. Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks / containers instead of one single large capacity tank / containers.
- 92. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
- 93. Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.
- 94. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.
  - younnity.

    93 Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.

### B.2.5 NOISE:

- 96. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.
- 97. Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.
- 98. To minimize the noise pollution the following noise control measures shall be implemented:
  - Selection of any new plant equipment shall be made with specification of low noise levels.
  - Manufacturers / suppliers of major noise generating machines / equipments like air compressors, feeder pumps, turbine generators, etc. shall be instructed to make required design modifications wherever possible before supply and installation to mitigate the noise generation and to comply with the national / international regulatory norms with respect to noise generation for individual units
  - Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.
  - ✓ Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.
  - Employees shall be provided with ear protection measures like earplugs or earmuffs.
  - ✓ Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation.
  - Construction equipment generating minimum noise and vibration shall be chosen.
  - ✓ Ear plugs and/muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment.
  - ✓ Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.
  - ✓ Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.
  - ✓ Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.

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#### **B.2.6 CLEANER PRODUCTION AND WASTE MINIMISATION:**

- 99. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
- 100. The company shall undertake various waste minimization measures such as :
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or as raw materials substitutes.
  - c. Use of automated and close filling to minimize spillages.
  - d. Use of close feed system into batch reactors.
  - e. Venting equipment through vapour recovery system.
  - f. Use of high pressure hoses for cleaning to reduce wastewater generation.
  - g. Recycling of washes to subsequent batches.
  - h. Recycling of steam condensate.
  - i. Sweeping / mopping of floor instead of floor washing to avoid effluent generation.
  - j. Regular preventive maintenance for avoiding leakage, spillage etc.

### B.2.7 GREEN BELT AND OTHER PLANTATION:

- 101. The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.
- 102.Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.
- 103. The PP shall develop green belt within premises (21024 Sq. m i.e. 33 % of the total plot area) as submitted before SEAC.

  Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.

#### **B.3 OTHER CONDITION:**

- 104.PP shall carry out the safety audit and Risk Assessment Report as per the prevailing guidelines of safety.
- 105.Management of Fly Ash shall be as per the Fly Ash Notification 2009 & its amendment from time to time its its be ensured that there is 100 % utilization of fly ash to be generated from the unit.
- 106.EMP should invariably include provisions for environmental Monitoring and measures for noise pollution control mbasures.
- 107.In EMP proponent should seperately indicate majors of occupational health, fire and safety measures.
- 108.Prior EC is granted is subject to the proponent receiving all statutory permission / clearances / certificates and membership of respective agencies / authorities which ever applicable. Proponent shall inform progress from time to time, in six monthly compliance report to MOEFCC / SEIAA / SEAC/ GPCBfailing to which this provisional EC will stand withdrawn.
- 109.All transport movement by tankers etc has to be done with maintenance of gate pass and logbook it should be verified by the inspecting authorities.
- 110.Non-hazardous waste data shall be informed to GPCB time to time so as to make an assessment and tie-up with industry for generating sustainable power from the waste.
- 111.EMP should include STP and detail cost including maintenance, transportation of waste water to CETP / CMEE etc as well as transportation cost or transit cost.
- 112.In LDAR preventive and predictive maintenance plan.
- 113.In LDAR leakage component, source of equipment leak, detention method should be given in table form.
- 114.In storage component should be shown separately in terms whether inflammable, toxic, corrosive, reactive etc.
- 115.In case of Fly Ash generation its management and disposal should be as per Government of India Notification and 100 % utilization should be ensured.
- 116.Project proponent shall install all environment management systems as per the CPCB/GPCB directives regarding the effluent discharge and air emission in working condition.
- 117. Project proponent shall display the copy of Environment Clearance at the site prominently.
- 118.Project proponent shall prepare and follow regular and preventive maintenance plan. The copy of same shall be submitted to SEIAA.
- 119. Project Proponent will have to display the safety procedure in working area.
- 120. The project proponent shall obtain all required permissions for safety, health and fire from competent authorities like PESO/Fire Authority etc. and intimate SEIAA.
- 121.Project Proponent will intimate SEIAA/SEAC/GPCB after obtaining the membership of common facilities like CETP / TSDF / CHWIF / CMEE / Common Spray Dryer as the case may be.
- 122. Extra care will be taken by PP to avoid any accidental blast in boiler, reactor or any machinery in the plant.
- 123. Environment monitoring, training and disaster management plan should be undertaken and complied at regular interval.
- 124.Integrated Regional Office of MoEF&CC Gandhinagar and GPCB will monitor all environment, safety & health norms as per the prevailing rules.

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- 125.The PP has to maintain the logsheets / registers / manifest / gate pass for discharge through tankers and SCADA system for pipeline discharge for the waste water generation and its disposal data and submit to the GPCB every quarter. GPCB shall verify the same on regular basis and inform SEIAA and take leagal action in the cases of non compliance.
- 126.Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA.III dated 09/08/2018 for Pharmaceutical and Chemical industries mentioned at (Sr. no. XX).
- 127. The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEFCC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
- 128. Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.
- 129. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.
- 130.Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.
- 131. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
- 132.All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
- 133.The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
- 134 In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
- 135. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
  - 136 During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
  - 137. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
  - 138.Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.
  - 139.No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
  - 140. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
  - 141. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
  - 142. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
  - 143. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
  - 144. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
  - 145.It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
  - 146.Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

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- 147. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
- 148. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
- 149. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
- 150. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- 151. This environmental clearance is valid for Ten years from the date of issue.
- 152. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 153. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

### B.4 COMPLIANCE OF ENVIRONMENT CLEARANCE/REPORTING/ADMINISTRATION/APPEAL:

- 154.Project proponent shall inform to all the concerned authorities including Municipal Corporation and District Collector and shall also give wide publicity through advertisement in minimum two local newspapers within seven days, about the Environment Clearance order accorded.
- 155.Project proponent shall appoint a key person in the organization who shall be responsible for compliance of above condition fully on behalf of the proponent. It will not mean that appointing a key person will exempt the project proponent from the responsibility of compliance. Any change in key person shall immediately be informed to SEIAA and all concerned authorities.
- 156.Designated key person shall submit six monthly compliance report to SEIAA/SEAC, MOEF&CC, GPCB and Nodal Department of the Government.
- 157. The Nodal Department or any authority or officer authorized by MOEF&CC/SEIAA can inspect the site of the project and all the facilities, for verification of compliances of environment clearance conditions.
- 158.In case of violation reported upon, the project proponent shall be responsible for all the legal actions as per Environment Protection Act, 1986 including SEIAA may cancel, withdraw or keep in abeyance, the Environment Clearance accorded.
- 159.Any person including the project proponent affected by this Environment Clearance order may file appeal to Honorable National Green Tribunal West Zone branch, Pune, preferably within a period of thirty days from the date of issue of Environment Clearance as prescribe under section 16 of National Green Tribunal Act 2010.
- 160.All complaints and public grievance or representations may be addressed to SEIAA/SEAC in the email addresses (a) msseiaagj@gmail.com& (b) seacgujarat@gmail.com

(ASAV P. GADHVI) Member Secretary

Issued to:

M/s. Birla copper Asoj Pvt. Ltd Survey No 21, Village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat,India, 391510



- 1. The Secretary, SEAC, C/O. G.P.C.B. Gandhinagar 382010.
- 2. The Additional Chief Secretary, Forests & Environment Department, Govt. of Gujarat, Block 14, 8th floor, Sachivalaya, Gandhinagar-382010.
- 3. The Chairman, Central Pollution Control Board , Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
- 4. Scientist C, Integrated Regional Office, Ministry of Environment and Forests, Aranya Bhavan, Sector-10, Gandhinagar 382010.
- 5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
- 6. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010
- 7. Select File

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# EC compliance report: Period of compliance - December 2023 to March 2024.

Environmental Clearance No.: SEIAA/GUJ/EC/3(a)/1609/2023 Dated: 13th Dec 2023

Name of the Project: Environmental Clearance to M/S. Birla Copper Asoj Pvt Ltd for setting up of manufacturing plant of metallurgical Industries at survey no. 21, village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat, India 391510 in Category 3(A) of schedule annexed with EIA Notification dated 14/09/2006

### List of the Products

S. No	Name of Products	Quantity
1	Copper Rod	19000
2	ABC (annealed bare conductor)	5000
	Total (TPM)	24000

### **EC Conditions:**

S. No	EC Condition	Compliance
A1	Specific Condition	1
1	PP shall provide total green belt area of 33.84 % as per their submission.	33% of the greenbelt area i.e. 21014 sqm is already provided in the plant premises in which approximately 1500 nos. of trees have already been planted
2	Proponent shall obtain Fire permission from competent authority.	As on date the Fire permission is not applicable to Hazardous Factories covered under the Factories Act, 1948 vide notification No. GH/v/68 OF 2021/AGN-102021-100-L1 dated 08 <sup>th</sup> July, 2021
3	PP shall take safety measures for workers against heat shocks, burns, flashing of fire and handling of heavy equipment and heavy items of steel etc.	Noted & complied
4	PP shall comply with Emergency measures and preparedness action for any accident.	Noted & complied
5	PP shall prepare on site emergency plan with relevant details.	Onsite emergency plan has been prepared and implemented by the unit
6	All the issues raised during public hearing and commitments made by the Project proponent shall be complied in letter and spirit.	Not applicable
7	The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R.No. 826 (E) dated 16th 2009 shall be complied with.	Noted & complied.  Copy of monitoring report is attached as
	with.	Annexure 1
8	Unit shall have to adhere to the prevailing area specific policies of GPCB with respect to the discharge of pollutants and shall carry out the project development in accordance & consistence with the same.	Noted and shall be complied
9	The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.	Noted and Shall be complied
10	All measures shall be taken to avoid ground water and soil contamination within premises.	Noted and shall be complied. There is no discharge of sewage or effluent on the ground
11	PP shall adopt renewable energy like installation of solar panel or solar light etc. for proposed project.	Solar rooftop of 0.985 MW capacity is installed by the unit
12	PP shall install secondary fume extraction at induction furnace area, as per details submitted by PP.	Not applicable as there is no involvement induction furnace within plant premises
13	Unit shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B- 29016/04/06PCI- 1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. [For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable].	Noted and shall be complied before December 2024.
14	Total water requirement for the project shall not exceed 328.5 KLD. Unit shall reuse 43.5 KLD of treated effluent within premises. Hence, fresh water requirement shall not exceed 285 KLD and it shall be met through borewell only. Prior permission from concerned authority shall be obtained for procurement of water.	Noted and complied. CGWA Permission is obtained for procurement of water.

S. No	EC Condition						Compliance	
15	The industria 43.5 KLD.	l effluent generat	ion from the pr	oject shall not	exceed	No	ted and compli	ed
16		of Industrial efflu	ient shall he as	under:				
	37 KLD of eff	luent generated f rposes within pre	rom RO reject	shall be re-used		Noted and com reject water	plied. The analy is attached as A	sis result of RO Annexure 1
17	Domestic was proposed pro off into soak plantation pu	stewater generating in the standing it shall be pit. Treated sewall rpose within prenoted by the GPCB	e treated in ST ge shall be utili nises after achi	P. It shall net bized for garden	e disposed ing and	The analysis i	oted and complic result of STP tre hed as <b>Annex</b> u	ated water is
18	During monso the plantation	oon season when n/Gardening /Gree ere shall be no dis	treated sewage enbelt purpose,	, it shall be stor	ed within	No	oted and compli	ed
19		vide buffer water eated wastewater			acity for	No	oted and compli	ed
20	storage of treated wastewater during rainy days  Unit shall provide STP and ETP with adequate capacity.					The water re project is only where we use I RO reject water used for garde only. The qua within the li	city of STP 26 K equirement for t in process and RO treated and	LD is installed. he proposed cooling tower, Borewell water. ed water will be vithin premises water is well e gardening
21		provide metering records for the s		inlet and outlet	of ETP	Unit shall inst	all ETP and the etering facilities	shall provide
22	Proper logbooks of ETP; reuse/ recycle of treated/ untreated effluent; chemical consumption in effluent treatment; quantity & quality of treated effluent; power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.  Unit shall not exceed fuel consumption for Shaft furnace and D G Set as				ity of d and shall		umption for sha	
	mentioned be	elow.					within the perm nentioned belov	
	Sr. No.	Sources of emission with capacity	Stack height (meter)	Type of fuel	Quantity of fuel	· .	Air pollution control measures (APCM)	Remarks
	1	Shaft furnace – 100 MT stacking capacity	32	Natural gas	1458 m3/h		Adequate stack height. Natural gas is used as a fuel.	
	2	500 DG set KVA	11	Diesel	100 lrts/hr	PM,SOx,Nox	DG set is used as a power backup only.	
24	PP shall use a	approved fuels on	ly as fuel in Sh	aft furnace and	D G Set.	No	ted and complie	ed.
						Shaft	ved fuels used b Furnace- Natura DG Set-HSD	al Gas
25	Unit shall provide adequate APCM with flue gas generation sources to achieve the norms prescribed by GPCB.				The monitoring are atta	ached as <i>Anne</i> .	analysis results <b>xure 1</b>	
26	There shall b	e no process gas	emission.			Noted and com emission	plied. There is from the plant	no process gas premises
27	monitored.	emission in the The emission shows the concerned a Industrial Safety	nall conform outhorities from	to the standa time to time (	ards e.g.		ted and complie	ed.

S. No	EC Condition	Compliance			
	guidelines shall also be followed to reduce the fugitive				
	Internal roads shall be either concreted or as	sphalted or	Noted and complied		
	paved properly to reduce the fugitive emiss	sion during			
	vehicular movement.				
	<ul> <li>Air borne dust shall be controlled with w suitable locations in the plant.</li> </ul>	at Noted and complied			
	A green belt shall be developed all around	the plant	Peripheral greenbelt has been developed		
	boundary and also along the roads to mitiga	ate fugitive	within the plant premises		
	& transport dust emission.	& transport dust emission.			
28	Regular monitoring of Volatile Organic Compounds (Volatile out in the work zone area and ambient air.	Not applicable as there is no use of solvent in the process.			
29	Regular monitoring of ground level concentration of F				
	NOx and VOCs shall be carried out in the impact zone		Monitoring results are attached as <b>Annexure</b>		
	shall be maintained. Ambient air quality levels shall standards stipulated by the GPCB. If at any stage the		1.		
	found to exceed the prescribed limits, necessary addi				
	measures shall be taken immediately. The location of				
	frequency of monitoring shall be decided in consultat				
A4	SOLID/HAZARDOUS WASTE:				
30	All the hazardous/solid waste management shall be to	Noted and complied			
	mentioned below.				
	Specific	0-4			

Sr. No.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity	Management of HW
1	Used Spent oil	Process	5.1 Schedule1	6.0	Generation, Collection, Storage, Transportation and Disposal by selling to registered/authorized refiner having valid CCA of GPCB & permission under HWM Rule- 2016 by use of GPS enable vehicle and XGN generated manifest.
	Oil contam inated cotton & Cloth waste	Used from operation & maintenance	5.2 Schedule 1	6.00	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF for coprocessing/incineration having valid CCA of GPCB & permission under HWI4 Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
3	Empty Containers & barrels	Lubricating grease & Oil, Cleaning Oil	33.1 Schedule1	10.00	Generation, Collection Storage, Transportation and Disposal by selling to registered/authorized re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and xGN generated manifest.
4	Emulsion	Process	5.2 schedule1	200.00	Generation, Collection Storage, Transportation and Disposal by selling to registered/authorized re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and xGN generated manifest
5	Waste Graphite Solution	Process	B2010	75.00	Generation, Collection Storage, Transportation and Disposal by selling to registered/authorized re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable

S. No		EC Condition				Compliance
110					I	vehicle and xGN generated manifest
	6	Used Resins	Process	35.2	1.00	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF for coprocessing/incineration having valid CCA of GPCB & permission under HWI4 Rule-2016 by use of GPS enable vehicle and XGN generated manifest
	7	Copper Oxide Mill Scale	Process	3 Schedule-IV	325.00	Generation, Collection, Storage, Transportation and Disposal to registered re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest.
	8	Copper reverts cakes and Residue	Process	4 Schedule I	3.00	Generation, Collection, Storage, Transportation and Disposal to registered re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest
	9	Slag From Copper Dross	Furnace	2 Schedule -1	115.00	Generation, Collection, Storage, Transportation and Disposal to registered re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and XGN generated manifest
	10	Used membrane/filter cloth and bags	Process	Z-Z37	0.40	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF having valid CCA of GPCB by use of GPS enable vehicle and XGN generated manifest.
	11	Used insulation	Process	X-X02	3.80	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF having valid CCA of GPCB by use of GPS enable vehicle and XGN generated manifest.
31	authoriti	ed end-users shall have   es under the Rule 9 of the ement and Transboundar	e Hazardous and C	Other Wastes		Not Applicable
32	Unit sha	II explore the possibilities essing of hazardous wast vastes before sending to	e for disposal of in	cinerable & land	ke	Noted and complied
33	The project proponent has to obtain membership of TSDF site & CHWIF before obtaining CTO of GPCB. (if applicable)					Noted and complied y of TSDF and CHWIF is attached as re 2 and Copy of CTO is attached as Annexure 3
34	Entire quantity of process slag generated from manufacturing plant shall be either used for land filling or sold to actual end users and record shall be maintained.					olicable as there is no generation of Process slag. In Copper Dross is sent to authorized TSDF only
A5 35	A.5 OTHER:  The project proponent shall carry out the activities of amount of Rs. 3.5 Crores as mentioned above (Solar street lights for self-sustaining Green technology at Paldi, Abhrampura, Panchdevla, Waste Management Service at Asoj, Paldi, Sanitation (Toilet unit) for Individual and Public at Hansapura, Pratappura, Khandiwada, Bodidra, Abhrampura, Ambatalav, Drainage					Noted and shall be complied. Idental clearance has been received on ecember 2023 and unit has started ing with local villager to understand rement of CER. The activities for CER is started at the earliest by the unit.

line/Water connection line at Asoj, Adiran, Khandiwada, Sinhapura, Rooftop rain water harvesting/septic tank at Adiran, Tree Plantation/Kitchen garden/Medicine garden/Flower pots at Panchdevla, Garden development with lawn cleaning and providing playground equipment at Asoj, Sarnej and Khandivala, Rooftop Solar panel for Anganwadi, Primary schools and health center at Asoj, Adiran, Sinhapura, Water tank (50,000 litres) at Paldi, Bio gas plant at Hansapura, Drilling and providing pipe for Bore well of diameter "8" at Bodidra, Sinhapura, Supply and Installation of Pavor blocks at Abhrampura, Adiran, Khandiwada, Sinhapura, Drinking water facility RO water purifier/filter at School/Anganwadi at Hansapura, Shankarpura, Sinhapura Abhrampura, Khandiwada, Uniform/Textbooks/ Sports uniform/Toys & Posters/Sports equipment/stationary at Pratappura, Panchdevla, Khandiwada, Bodidra, Paldi, Abhrampura, Adiran, Ambatalav, Sinhapura, Reconstruction of Panchayat building/Anganwadi/School/PHC & Community hall at Asoj, Hansapura, Pratappura,Bodidra,Abrahampura,Sinhapura, Shankarpura, Paldi, PanchdevIa,Adiran, Ambatalav, Providing computers/Printer for Computer lab at Asoj,Pratappura,Shankarpura, Paldi, Panchdevla,Khandiwada, Sinhapura, Hansapura, Smart class/ Projector/ Mic system/CCTV Camera at Asoj, Panchdevla, Bodidra, Shed for MDM at Bod Asoj, Entry gate of Village at Hansapura, Providing Sports equipment in school at Hansapura, Paldi, Ambatalav idra, Khandiwada, Ambatalav, Tables/Chairs/Cupboard/Benches/Desk/Mats/Utensils/	
Tree Plantation/Kitchen garden/Medicine garden/Flower pots at Panchdevla, Garden development with lawn cleaning and providing playground equipment at Asoj, Sarnej and Khandivala, Rooftop Solar panel for Anganwadi, Primary schools and health center at Asoj, Adiran, Sinhapura, Water tank (50,000 litres ) at Paldi, Bio gas plant at Hansapura, Drilling and providing pipe for Bore well of diameter "8" at Bodidra, Sinhapura, Supply and Installation of Pavor blocks at Abhrampura, Adiran, Khandiwada, Sinhapura, Drinking water facility RO water purifier/filter at School/Anganwadi at Hansapura, Shankarpura, Sinhapura Abhrampura, Khandiwada, Uniform/Textbooks/ Sports uniform/Toys & Posters/Sports equipment/stationary at Pratappura, Panchdevla, Khandiwada, Bodidra, Paldi, Abhrampura, Adiran, Ambatalav, Sinhapura, Reconstruction of Panchayat building/Anganwadi/School/PHC & Community hall at Asoj, Hansapura, Pratappura,Bodidra,Abrahampura,Sinhapura, Shankarpura, Paldi, PanchdevIa,Adiran, Ambatalav, Providing computers/Printer for Computer lab at Asoj, Pratappura,Shankarpura, Paldi, Panchdevla,Khandiwada, Sinhapura, Hansapura, Smart class/ Projector/ Mic system/CCTV Camera at Asoj, Panchdevla, Bodidra, Shed for MDM at Bod Asoj, Entry gate of Village at Hansapura, Providing Sports equipment in school at Hansapura, Paldi, Ambatalav idra, Khandiwada,	
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Affibaciaty, rabies/ Chairs/ Cupboard/ Benches/ Desk/ Mats/ Otensils/	
Fan at Asoj, Pratappura, Bodidra, Hansapura, Adiran, Setting of	
Library with books at Asoj, Paldi, Gymnasium at Asoj, Providing	
ambulance at PHC Asoj, Change/Reconstruction of compound	
wall at Pratappura, Bodidra, Paldi, Sinhapura, Adiran, RCC road	
at Adiran, Sinhapura, Conducting Health check-up camps at	
Adiran, Sinhapura, One day picnic for school children at Asoj	
and Colour paint in Anganwadi/School/PHC/Panchay at	
Ambatalav, Khandiwada) proposed under CER and it shall be	
part of the Environment Management Plan (EMP) as per the	
MoEF&CC's OM no. F. No. 22-65/2017-IA.III dated 30.09.2020.	
This shall be monitored and the monitoring report shall be	
submitted to the regional office of MoEF&CC as a part of half-	
yearly compliance report and to the District Collector. The	
monitoring report shall be posted on the website of the project	
proponent.	
36 As proposed at least Ds. 3 lakes shall be allocated for the consequation. The consequation plan has be	neen submitted to
As proposed, at least Rs. 3 lakhs shall be allocated for the conservation plan Schedule- I species. (MoEF&CC).  The conservation plan has be PCCF for approval. Inward contact attached as <b>Anne</b>	opy of the same is
37 All the recommendations, mitigation measures, environmental Noted and com	
protection measures and safeguards proposed in the EIA report of	•
the project prepared by M/s. Kadam Environment Consultants and	
submitted by the project proponent and commitments made during presentation before SEAC and proposed in the EIA report shall be	
strictly adhered to in letter and spirit.	
B GENERAL- CONDITIONS:	
B1 CONSTRUCTION PHASE  29 Water demand during construction shall be reduced by use of suring. Not Applicable as project in	
38 Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices  Not Applicable as project is operation phase and EC wa	. currently and an
regularizatio	

S. No	EC Condition	Compliance
39	Project proponent shall ensure that surrounding environment shall not be affected due to construction activity Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.	Not Applicable as project is currently under operation phase and EC was received under regularization
40	All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.	Not Applicable as project is currently under operation phase and EC was received under regularization
41	First Aid Box shall be made readily available in adequate quantity at all the times.	Not Applicable as project is currently under operation phase and EC was received under regularization
42	The project proponent shall strictly comply with the building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local bye-laws of concern authority shall be complied in letter and spirit	Not Applicable as project is currently under operation phase and EC was received under regularization
43	Ambient noise levels shall confirm to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.	Not Applicable as project is currently under operation phase and EC was received under regularization
44	Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.	Not Applicable as project is currently under operation phase and EC was received under regularization
45	Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured	Not Applicable as project is currently under operation phase and EC was received under regularization
46	All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.	Not Applicable as project is under operation phase and EC was received under regularization
47	Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.	Not Applicable as project is currently under operation phase and EC was received under regularization
48	Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete [RMC] and lead free paints in the project.	Not Applicable as project is currently under operation phase and EC was received under regularization
49	Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.	Not Applicable as project is currently under operation phase and EC was received under regularization
50	"Wind - breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided. Individual building within the project site shall also be provided with barricades.	Not Applicable as project is currently under operation phase and EC was received under regularization
51	'No uncovered vehicles carrying construction material and waste shall be permitted.'	Not Applicable as project is currently under operation phase and EC was received under regularization
52	"No loose soil or sand or construction & demolition waste or any other construction material that cause dust shall be left uncovered. Uniform piling and proper storage of sand to avoid fugitive emissions shall be ensured.	Not Applicable as project is currently under operation phase and EC was received under regularization
53	Roads leading to or at construction site must be paved and blacktopped (i.e metallic roads)	Not Applicable as project is currently under operation phase and EC was received under regularization
54	No excavation of soil shall be carried out without adequate dust mitigation measures in place.	Not Applicable as project is currently under operation phase and EC was received under regularization
55	Dust mitigation measure shall be displayed prominently at the construction site for easy public viewing.	Not Applicable as project is currently under operation phase and EC was received under regularization
56	Grinding and cutting of building materials in open area shall be prohibited.	Not Applicable as project is currently under operation phase and EC was received under regularization
57	Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.	Not Applicable as project is currently under operation phase and EC was received under regularization

S. No	EC Condition	Compliance
58	Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site. (If applicable)	Not Applicable as project is currently under operation phase and EC was received under regularization
B2	OPERATION PHASE:	
B2.	WATER:	
59	The water meter shall be installed, and records of daily and monthly water consumption shall be maintained.	Noted and complied. Water meters are provided in both the borewells.
60 <b>B2.</b>	All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The unit shall continuously strive to reduce, recycle and reuse the treated effluent.  AIR	There is no generation of effluent from the process
2		
61	In case of use of spray dryer, the unit shall provide the adequate & efficient APCMS with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & it's APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.	Not applicable as there is no use of spray dryer within plant premises
62	Acoustic enclosure shall be provided to the DG sets (If applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.	Inbuilt acoustic enclosure is provided in DG Set
63	Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for emission/Process gas emission.	Noted and complied. The stack analysis report is attached as  **Annexure 1**
64	Flue gas emission & Process gas emission (If any) shall confirm to the standards prescribe GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.	Noted and complied. The stack analysis report is attached as  **Annexure 1**
65	All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emissions.  B.2.3 HAZARDOUS/SOLID WASTE:	Not applicable as there is no use of reactor/vessel in the manufacturing process
66	The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (management and Transboundary Movement) Rules 2016, ds may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.	Noted and complied The copy of TSDF and CHWIF is attached as  **Annexure 2**
67	Hazardous wastes shall be dried, packed, and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.	Noted and complied The copy of TSDF and CHWIF is attached as  **Annexure 2**
68	The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)	Noted and complied The copy of TSDF and CHWIF is attached as  **Annexure 2**
69	Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.	Noted and complied
70	The design of the Trucks/tankers shall be such that there is no spillage during transportation	Noted and complied
71	All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.	Noted and complied
72	Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.	Not applicable as there is no generation of fly ash from the process
B 2.4	Safety	
73	Requisite On-site and Off-site Disaster Management Plans have to be	Noted and complied
74	prepared and implemented.  Sufficient no. of fire extinguishers shall be provided near the plant and storage area.	On-site emergency plan is available.  Noted and complied
75	The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.	Noted and complied
76	Only flame proof electrical fittings shall be provided in the plant premises.	Noted and complied

S. No	EC Condition	Compliance
77	Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.	Noted and complied Healthcare unit is available with doctor within plant premises & tie-up with Ashirwad hospital near Jarod village is already done.
78	Personal Protective Equipment's like heat resistant suit shall be provided to workers and its usage shall be ensured and supervise.	Noted and complied Adequate PPEs are being provided to all workers
79	First Aid Box shall be made readily available in adequate quantity.	Noted and complied OHC center with all adequate facilities are available within plant premises
80	Training shall be imparted to all the workers on safety and health aspects of chemicals handling.	Noted and complied Regular training is being given to all workers on safety and health aspect  Latest training record is attached as  Annexure 5
81	Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodic medical examination for all the workers shall be undertaken as per the Factories Act & Rules.	Noted and complied Summary of medical examination of workers is attached as <i>Annexure 6</i>
82	The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.	Noted and complied
83	Necessary permissions from various statutory authorities like Factory inspectorate and others shall be obtained prior to commissioning of the project if applicable.	Noted and complied
84	The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963  The project authorities shall strictly comply with the provisions made in Manufacture, Storage and import of Hazardous Chemicals Rules	Noted and complied  Noted and complied
	(MSIHC)1989, as amended time to time and the Public Liability insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented	Copy of <b>PLI is attached as Annexure 7</b>
86	Main entry and exit shall be separate and clearly marked in the facility	Noted and complied  The copy of Layout map is attached as  Annexure 8
87	Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.	Noted and complied  The copy of Layout map is attached as  Annexure 8
88	Storage of flammable chemicals shall be sufficiently away from the production area.	Not applicable as there is no storage of flammable chemical within plant premises
89	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.	Not applicable as there is no storage of toxic or hazardous chemical within plant premises
90	All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.	Not applicable as there is no storage of toxic or hazardous chemical within plant premises
91	Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks / containers instead of one single large capacity tank / containers.	Not applicable as there is no storage of toxic or hazardous chemical within plant premises
92	All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.	Not applicable as there is no storage of toxic or hazardous chemical within plant premises
93	Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs	Not applicable as there is no storage of toxic or hazardous chemical within plant premises
94	First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity	Noted and complied OHC center with all adequate facilities are available within plant premises
95	transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rule	Noted and complied
B2.	Noise	
96	The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall	Noted and complied  Copy of Work zone monitoring report is attached <i>as Annexure 1</i>

S. No	EC Condition	Compliance
	confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.	
97	Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.	Noted and complied
98	To minimize the noise pollution the following noise control measures shall be implemented.	
	<ul> <li>Selection of any new plant equipment shall be made with specification of low noise levels.</li> </ul>	Noted and complied
	<ul> <li>Manufacturers / suppliers of major noise generating machines / equipment's like air compressors, feeder pumps, turbine generators, etc. shall be instructed to make required design modifications wherever possible before supply and installation to mitigate the noise generation and to comply with the national / international regulatory norms with respect to noise generation for individual unit</li> </ul>	Noted and complied
	<ul> <li>Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.</li> </ul>	Noted and complied
	<ul> <li>Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.</li> </ul>	Noted and complied
	<ul> <li>Employees shall be provided with ear protection measures like earplugs or earmuffs.</li> </ul>	Noted and complied
	<ul> <li>Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipment's to reduce noise generation.</li> </ul>	Noted and complied
	<ul> <li>Construction equipment generating minimum noise and vibration shall be chosen</li> </ul>	Noted and complied
	<ul> <li>Ear plugs and/muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment</li> </ul>	Noted and complied
	<ul> <li>Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate</li> </ul>	Noted and complied
	<ul> <li>Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.</li> </ul>	Noted and complied
	<ul> <li>Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.</li> </ul>	Noted and complied
B 2.6	CLEANER PRODUCTION AND WASTE MINIMISATION	
99	The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.	Noted and shall be complied
100	The company shall undertake various waste minimization measures such as:	
	Metering and control of quantities of active ingredients to minimize waste	Not applicable as there is no use of active ingredient which can measure through metering
	Reuse of by-products from the process as raw materials or as raw materials substitutes.	Not applicable as there is no generation of by- products
	Use of automated and close filling to minimize spillages Use of close feed system into batch reactors.	Noted and complied  Not applicable as there is no use of any chemical in the process
	Venting equipment through vapour recovery system.	Not applicable as there is no use of any chemical in the process
	Use of high-pressure hoses for cleaning to reduce wastewater generation.	Not applicable as there is no generation of wastewater from the process
	Recycling of washes to subsequent batches.	Not applicable as there is no generation of wastewater from the process
	Recycling of steam condensate.	Not applicable as there is no use of boiler in the process
	Sweeping / mopping of floor instead of floor washing to avoid effluent generation	Not applicable as there is no generation of effluent
	Regular preventive maintenance for avoiding leakage, spillage etc.	Not applicable as there is no use of any chemical in the process
B 2.7	GREEN BELT AND OTHER PLANTATION	

S. No	EC Condition	Compliance
101	The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in G DC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.	33% of the greenbelt area i.e. 21014 sqm is already provided in the plant premises in which approximately 1500 nos. of trees already been planted  To meet the requirement of 2500 nos of tress per ha additional 1600 nos of tree shall be planted in next 3 years as committed in EC
102	Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.	Noted and complied
103	The PP shall develop green belt within premises (21024 Sq. m i.e. 33 % of the total plot area) as submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.	33% of the greenbelt area i.e. 21014 sqm is already provided in the plant premises in which approximately 1500 nos. of trees have already been planted  To meet the requirement of 2500 nos of tress per ha additional 1600 nos of tree shall be planted in next 3 years as committed in EC
В3	B.3 OTHER CONDITION:	
104	PP shall carry out the safety audit and Risk Assessment Report as per the prevailing guidelines of safety.	Noted and complied Safety audit is done as per compliance by authorized vendor. Copy of Safety audit report is attached as  **Annexure 9**
105	Management of Fly Ash shall be as per the Fly Ash Notification 2009 & its amendment from time to time and it shall be ensured that there is 100 % utilization of fly ash to be generated from the unit.	Not applicable as there is no generation of fly ash.
106	EMP should invariably include provisions for environmental Monitoring and measures for noise pollution control measures.	Noted and complied Copy of monitoring report is attached as  **Annexure 1**
107	In EMP proponent should separately indicate majors of occupational health, fire and safety measures	Noted and complied
108	Prior EC is granted is subject to the proponent receiving all statutory permission / clearances / certificate and membership of respective agencies / authorities which ever applicable. Proponent shall inform progress from time to time, in six monthly compliance report to MOEFCC / SEIAA / SEAC/ GPCB failing to which this provisional EC will stand withdrawn.	Noted
109	All transport movement by tankers etc has to be done with maintenance of gate pass and logbook it should be verified by the inspecting authorities.	Noted and complied
110	Non-hazardous waste data shall be informed to GPCB time to time so as to make an assessment and tie-up with industry for generating sustainable power from the waste.	Noted and complied
111	EMP should include STP and detail cost including maintenance, transportation of wastewater to CETP / CMEE etc as well as transportation cost or transit cost.	Noted and complied
112	In LDAR preventive and predictive maintenance plan.	Not applicable as there is no use of solvent
113	In LDAR leakage component, source of equipment leak, detention method should be given in table form.	Not applicable as there is no use of solvent
114	In storage component should be shown separately in terms whether inflammable, toxic, corrosive, reactive etc	Not applicable as there is no use of solvent
115	In case of Fly Ash generation its management and disposal should be as per Government of India Notification, and 100 % utilization should be ensured.	Not applicable as there is no generation of Fly ash.
116	Project proponent shall install all environment management systems as per the CPCB/GPCB directives regarding the effluent discharge and air emission in working condition	Noted and shall be complied before December 2024
117	Project proponent shall display the copy of Environment Clearance at the site prominently	Noted and complied
118	Project proponent shall prepare and follow regular and preventive maintenance plan. The copy of same shall be submitted to SEIAA.	Noted and will be complied
119	Project Proponent will have to display the safety procedure in working area.	Noted and complied Unit has displayed safety procedure in working area
120	The project proponent shall obtain all required permissions for safety, health and fire from competent authorities like PESO/Fire Authority etc. and intimate SEIAA.	Noted and shall be complied as and when applicable.

S. No	EC Condition	Compliance
121	Project Proponent will intimate SEIAA/SEAC/GPCB after obtaining the membership of common facilities like CETP / TSDF / CHWIF / CMEE / Common Spray Dryer as the case may be.	Noted and complied The copy of TSDF and CHWIF is attached as  **Annexure 2**
122	Extra care will be taken by PP to avoid any accidental blast in boiler, reactor, or any machinery in the plant.	Not applicable as there is no boiler, reactor within plant premises. Adequate measure shall be taken to avoid accidental blast in shaft furnace.
123	Environment monitoring, training and disaster management plan should be undertaken and complied at regular interval	Noted and complied Copy of monitoring report is attached as  **Annexure 1**
124	Integrated Regional Office of MoEF&CC Gandhinagar and GPCB will monitor all environment, safety & health norms as per the prevailing rules.	Noted
125	The PP has to maintain the logsheets / registers / manifest / gate pass for discharge through tankers and SCADA system for pipeline discharge for the waste water generation and its disposal data and submit to the GPCB every quarter. GPCB shall verify the same on regular basis and inform SEIAA and take legal action in the cases of non-compliance.	Noted and complied Copy of manifest is attached as <b>Annexure 10</b>
126	Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No.22-3412018-IA.III dated 09/08/2018 for Pharmaceutical and Chemical industries mentioned at (Sr. no. xx).	Not applicable
127	The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEFCC'S Office Memorandum No. F.No.22-65/2017-IA.III dated O1/O5/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEFCC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.	Noted and shall be complied Environmental clearance has been received on 13 <sup>th</sup> December 2023 and unit has started interacting with local villager to understand the requirement of CER. The activities for CER shall be started at the earliest by the unit.
128	Rainwater harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter	Noted and complied At present unit has recharge wells present within plant premises.
129	The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC	Noted and shall be complied
130	Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided	Solar rooftop of 0.985 MW capacity is installed by the unit
131	The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.	Noted and complied
132	All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered lo	Noted
133	The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.	Noted
134	In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted	Noted
135	until the desired efficiency of the control equipment has been achieved.  The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	Noted and shall be complied
136	During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water	Noted and shall be complied
137	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	Not applicable as there is no storage of chemical within plant premises
138	Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.	Noted and shall be complied

S. No	EC Condition	Compliance
139	No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned. Authority	Noted and shall be complied
140	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act,1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes managements, Handling and Transboundary Movement) Rules, 2008 and the Public Liability insurance Act, 1991 along with their amendments and rules	Noted and shall be complied
141	The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.	Noted and shall be complied
142	The project management shall ensure that unit complies 'with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.	Noted and shall be complied
143	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Noted and shall be complied
144	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA) SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	The Advertisement of EC has been published in the English Newspaper i.e Indian Express and Gujarati News paper i.e Divya Bhaskar on 17th December 2023 within 4 days of the EC receipt of clearance letter from SEIAA  CIRCL STUR MIRES U
145	It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on '1st June and 1sl December of each calendar year.	Noted and complied
146	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted
147	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	Noted

S. No	EC Condition	Compliance
148	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	Noted
149	The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary	Noted
150	The project authorities shall inform the GPCB, Regional Office of MOEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Noted and EC is received under regularization and plant is under operation phase.
151	This environmental clearance is valid for Ten years from the date of issue.	Noted
152	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted
153	Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.	Noted
B 4	COMPLIANCE OF ENVIRONMENT CLEARANCE/REPORTING/ADMINISTRATION/APPEAL:	
154	Project proponent shall inform to all the concerned authorities including Municipal Corporation and District Collector and shall also give wide publicity through advertisement in minimum two local newspapers within seven days, about the Environment Clearance order accorded.	Noted and complied. Inward copy of the same is attached as  Annexure 11
155	Project proponent shall appoint a key person in the organization who shall be responsible for compliance of above condition fully on behalf of the proponent. It will not mean that appointing a key person will exempt the project proponent from the responsibility of compliance. Any change in key person shall immediately be informed to SEIAA and all concerned authorities.	Noted and Mr. Lawrence Gonsalves is appointed as key person who shall be responsible for the compliance of above conditions.
156	Designated key person shall submit six monthly compliance report to SEIAA/SEAC, MOEF&CC, GPCB and Nodal Department of the Government.	Noted
157	The Nodal Department or any authority or Officer authorized by MOEF&CC/SEIAA can inspect the site of the project and all the facilities, for verification of compliances of environment clearance conditions.	Noted
158	In case of violation reported upon, the project proponent shall be responsible for all the legal actions as per Environment Protection Act, 1986 including SEIAA may cancel, withdraw or keep in abeyance, the Environment Clearance accorded.	Noted
159	Any person including the project proponent affected by this Environment Clearance order may file appeal to Honourable National Green Tribunal West Zone branch, Pune, preferably within a period of thirty days from the date of issue of Environment Clearance as prescribe under section 16 of National Green Tribunal Act 2010.	Noted
160	All complaints and public grievance or representations may be addressed to SEIAA/SEAC in the email addresses (a) msseiaagj@gmail.com& (b) seacgujarat@gmail.com	Noted



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## **ENVIRONMENTAL MONITORING REPORT**

### **LABORATORY TEST REPORT - STACK**

REPORT NO.: APR24/047/01 (ULR- TC709924000008154F)

### SAMPLE DETAILS

				SAM	PLE L	DETAILS		
1.	Name & Address of Client:   Survey No. 21, Village - Asc						– Vadoo	dara 391510
2.	Sample ID: 2148458246-0	47AP24SE01		3	3. (	Client Representative: Mr	nce Gonsalves	
4.	Sample Date: 06.04.2024			5	5. 5	Sampling Location: D.G.S	Set (500	KVA)
6.	Sampling Time: 11:30 hr			7	'. S	Sampling Duration: 20 M	in	
8.	Analysis commenced on: 08	3.04.2024		9	). /	Analysis Completed on: 0	8.04.20	)24
10.	Reporting Date: 19.04.2024			1:	1. [	Discipline: Chemical		
12.	Sample Collected By: Mr.Ga	urang		13	_	Group: Atmospheric Pollu	rtion	
14.	Sampling Procedure: IS Mel			1!	_	Product: Stack Emission		
16.	Description of Sample:	Sampling Bo	ottle		- 1	Thimble: Packed v	/ B	ladder: Clamped √
17.	Sample Received Date : 08.				-	Timible Faciled		idader. Glamped v
271	ouripie received bate : 00.	01.2021		CTA	CK D	ETATI C		
o N		T		SIA	CK D	ETAILS .		
<u>S. No.</u>	<u>Parameters</u>	Unit (SI)	L				ription	
1.	Source		:	D.G.S	et (50	00 KVA)		
2.	Height	m	:	4.8				
3.	Diameter	mm	:	150				
4.	Temperature	°c	:	107				
5.	Velocity	m/s	:	7.54				
6.	Type of fuel used		:	HSD				
7.	Quantity of fuel used		:	-				
				TES	T RE	SULTS		
<u>S. No.</u>	<u>Parameters</u>	<u>Unit</u> (SI)		Res	<u>sults</u>	Specification/SPCB Norms/BIS Standar	ds	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	:	6	51	150	IS	5 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	•	16	.55	100		S 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	*	11.89		50		S 11255 (Part 7) : 2005
4.	CO	mg/Nm³	:	78	3.90	N.A	IS	S 11255 (Part 3): 2008
Remar	DE MO					1:		
	ized By							
Name :	Bhavisha Pandya				Desi	gnation : Sr.Chemist		

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Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.

The results reported above relate to the sample identified under Sample Details.

	<b>TEST REPORT FORMAT - STACK</b>	
DOC. NO.: LAB-FMT-052	Issue No.: 01	Revision No.: 00
Effective Date:. 26.03.2024	Issue Date: 26.03.2024	Revision Date:

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

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## **LABORATORY TEST REPORT - STACK**

REPORT NO.: APR24/047/03

### SAMPLE DETAILS

				SAMPI	LE DE I	AILS		
1.	Name & Address of Client: Survey No. 21, Village - Aso						adodara 391510	
2.	Sample ID: 2148458246- 0					Client Representative: Mr.Lawrance Gonsalves		
4.	Sample Date: 06.04.2024			5.	San	npling Location: D.G.Set (	500 KVA)	
6.	Sampling Time: 11:30 hr			7.	Sam	pling Duration: 20 Min		
8.	Analysis commenced on: 08	3.04.2024		9.	Ana	lysis Completed on: 08.04	1.2024	
10.	Reporting Date: 19.04.2024	ł		11.	Disc	cipline: Chemical		
12.	Sample Collected By: Mr.Ga	urang		13.	Gro	up: Atmospheric Pollution		
14.	Sampling Procedure: IS Me	thod		15.		duct: Stack Emission		
16.	Description of Sample:	Sampling Bo	ottle	s: Sealed	l √	Thimble: Packed √	Bladder: Clamped √	
17.	Sample Received Date: 08.	04.2024					· · · · · · · · · · · · · · · · · · ·	
				STAC	K DETA	ILS		
<u>S. No.</u>	Parameters	Unit (SI)				Descript	ion	
1.	Source		:	D.G.Set	(500 F	(VA)		
2.	Height	m	:	4.8				
3.	Diameter	mm	:	118				
4.	Temperature	°C	:	107				
5.	Velocity	m/s	:	7.54				
6.	Type of fuel used		:	HSD				
7.	Quantity of fuel used		:	-				
	10.			TEST	RESUL	TS		
<u>S. No.</u>	<u>Parameters</u>	Unit (SI)		Resu	ilt <u>s</u>	Specification/SPCB Norms/BIS Standards	Method Used	
1.	Hydrocarbon (HC)	mg/Nm <sup>3</sup>	:	23.5	51	N.A	Gas Chromatography	
Rema	A A							
	rized By -							
	: Bhavisha Pandya				Designa	ation : Sr.Chemist		

NOTE:

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Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during

The results reported above relate to the sample identified under Sample Details.

	<b>TEST REPORT FORMAT - STACK</b>	
DOC. NO.: LAB-FMT-052	Issue No.: 01	Revision No.: 00
Effective Date:. 26.03.2024	Issue Date: 26.03.2024	Revision Date:

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

Phone: (O) 0265 - 6131000, 6131001





## **LABORATORY TEST REPORT - STACK**

**REPORT NO.: APR24/047/04** 

### **SAMPLE DETAILS**

1.	Name & Address of Client:	M/s. Birla Cop	per	Asoj Pri	vate L	imited.			
	Survey No. 21, Village - Asc		lalc	l Highwa	ay, Tal	uka – Waghodia, Dist. – V	adodara 391510		
2.	Sample ID: 2148458246-0	47AP24SE02		3.	Cli	Client Representative: Mr.Lawrance Gonsalves			
4.	Sample Date: 06.04.2024			5.	Sa	mpling Location: Furnace :	Stack		
6.	Sampling Time: 12:20 hr			7.	Sa	mpling Duration: 20 Min			
8.	Analysis commenced on: 08	3.04.2024		9.	An	alysis Completed on: 08.0	4.2024		
10.	Reporting Date: 19.04.2024			11.	Dis	scipline: Chemical			
12.	Sample Collected By: Mr.Ga	urang		13.	Gr	oup: Atmospheric Pollution	1		
14.	Sampling Procedure: IS Met	thod		15.	Pro	oduct: Stack Emission			
16.	Description of Sample:	Sampling Bo	ottle	s: Sealed	d √	Thimble: Packed √	Bladder: Clamped √		
17.	Sample Received Date : 08.								
				STAC	K DET	AILS			
S. No.	<u>Parameters</u>	Unit (SI)				Descript	ion		
1.	Source		:	Furnac	e Stac	k			
2.	Height	m	:	25					
3.	Diameter	mm	:	1094					
4.	Temperature	°С	:	395					
5.	Velocity	m/s	:	13.81					
6.	Type of fuel used		:	LNG					
7.	Quantity of fuel used		:	_					
				TEST	RESU	JLTS			
S. No.	<u>Parameters</u>	<u>Unit</u> (SI)		Resu	ults	Specification/SPCB Norms/BIS Standards	Method Used		
1.	Hydrocarbon (HC)	mg/Nm³	:	25.8	87	N.A	Gas Chromatography		
Remar	1) [1]								
	ized By -								
Name :	Bhavisha Pandya				Desig	nation : Sr.Chemist			

NOTE:

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  Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
- The results reported above relate to the sample identified under Sample Details.

	<b>TEST REPORT FORMAT - STACK</b>	
DOC. NO.: LAB-FMT-052	Issue No.: 01	Revision No.: 00
Effective Date:. 26.03.2024	Issue Date: 26.03.2024	Revision Date:



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10. Phone : **(O) 0265 - 6131000, 6131001** 



# **ENVIRONMENTAL MONITORING REPORT**

# **LABORATORY TEST REPORT – STACK**

REPORT NO.: APR24/047/02 (ULR-TC709924000008155F)

### SAMPLE DETAILS

	Name & Address of Client: I Survey No. 21, Village - Asc	oj, Vadodara I	Halo	i Highway,	, Taluk	a – Waghodia, Dist. – Va	adodara 391510		
2.	Sample ID: 2148458246- 0	47AP24SE02		3.	Clien	t Representative: Mr.Lav	vrance Gonsalves		
4.	Sample Date: 06.04.2024			5.	Sampling Location: Furnace Stack				
6.	Sampling Time: 12:20 hr			7.	Samp	Sampling Duration: 20 Min			
8.	Analysis commenced on: 08	3.04.2024	9.	Analy	sis Completed on: 08.04	1.2024			
10.	Reporting Date: 19.04.2024	-	11.	Disci	pline: Chemical				
12.	Sample Collected By: Mr.Ga	urang	13.	<u> </u>	p: Atmospheric Pollution				
14.	Sampling Procedure: IS Met		15.		uct: Stack Emission				
16.	Description of Sample:	Sampling Bo	nttle			Thimble: Packed √	Bladder: Clamped √		
17.	Sample Received Date : 08.			o. ocarca	<b>T</b>	THINDIC! I GCRCG V	biddaci. Cidifiped y		
-/-	outple received bate : oo.	01.2021	_	STACK	D=4.				
						LS			
				STACK	DLIAL				
		Unit (SI)		STACK	DLIAL	Descripti	ion		
1.	Source	Unit (SI)	:	Furnace :			ion		
		Unit (SI)	:				ion		
	Source		+	Furnace :			ion		
1.	Source Height	m	:	Furnace :			ion		
1. 2. 3.	Source Height Diameter	m mm	:	Furnace : 25 1094			ion		
1. 2. 3. 4.	Source Height Diameter Temperature	m mm °c	:	Furnace 9 25 1094 395			ion		
1. 2. 3. 4. 5.	Source Height Diameter Temperature Velocity	m mm °c	:	Furnace : 25 1094 395 13.81			ion		
1. 2. 3. 4. 5.	Source Height Diameter Temperature Velocity Type of fuel used	m mm °c	:	Furnace 9 25 1094 395 13.81 LNG	Stack	Descripti	ion		
1. 2. 3. 4. 5.	Source Height Diameter Temperature Velocity Type of fuel used	m mm °c	:	Furnace 9 25 1094 395 13.81 LNG	Stack RESULT	Descripti	Method Used		
1. 2. 3. 4. 5. 6. 7.	Source Height Diameter Temperature Velocity Type of fuel used Quantity of fuel used	m mm °c m/s	:	Furnace : 25	Stack RESULT	Descripti  Specification/SPCB			
1. 2. 3. 4. 5. 6. 7.	Source Height Diameter Temperature Velocity Type of fuel used Quantity of fuel used	m mm °c m/s	:	Furnace : 25 1094 395 13.81 LNG - TEST R	Stack RESULT	Descripti  S Specification/SPCB Norms/BIS Standards	Method Used		
1. 2. 3. 4. 5. 6. 7. <b>S. No.</b>	Source Height Diameter Temperature Velocity Type of fuel used Quantity of fuel used  Parameters Particulate Matter	m mm °c m/s	: : : : : : : : : : : : : : : : : : : :	Furnace : 25 1094 395 13.81 LNG - TEST R Result	Stack  RESULT	Description  Specification/SPCB Norms/BIS Standards  150	Method Used IS 11255 (Part 1): 1985		

Name : Bhavisha Pandya Designation : Sr.Chemist

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 Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.

3) The results reported above relate to the sample identified under Sample Details.

	<b>TEST REPORT FORMAT - STACK</b>	
DOC. NO.: LAB-FMT-052	Issue No.: 01	Revision No.: 00
Effective Date:. 26.03.2024	Issue Date: 26.03.2024	Revision Date:



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone : **(0) 0265 - 6131000, 6131001** 



### **ENVIRONMENTAL MONITORING REPORT**

### **LABORATORY TEST REPORT – AMBIENT**

REPORT NO.: APR24/047/05 (ULR- TC709924000008156F)

### SAMPLE DETAILS

17.	Rain: No Rain		Direction: Up wind	Trainic			nd blowing			category: Industrial
17	<b>Environment Condition</b>	1:	Temp: Normal	Humio	litv:	_		Wind speed: Sr		Cloud cover: Partly Cloudy
16.	Description of Sample:		Sampling Bottles:	Sealed	<b>√</b>	F	ilter Paper	: Packed √	Blade	der: Clamped √
14.	Sampling Procedure: Is	6 Meth	nod		15		Product: A	Ambient Air		
12.	Sample Collected By: N	1r.Gau	ırang		13		Group: At	mospheric Poll	ution	
10.	Reporting Date: 19.04.	.2024			11		Discipline:	Chemical		
8.	Analysis commenced o	menced on: 08.04.2024			9.		Analysis Completed on: 08.04.2024			
6.	Sampling time: 11:30 l	time: 11:30 hr			7.		Sampling	Duration: 24 H	irs	
4.	Sampling Date: 05.04.				5.		Sampling	Location: Nr. I	Main Gate	
2.	Sample ID: 21484582	46- 04	17AP24AQ01		3.		Client Rep	resentative: M	lr.Lawran	ce Gonsalves
1.			t: M/s. Birla Copper Asoj Priva Asoj, Vadodara Halol Highway					odia, Dist. – Va	adodara	391510

### **TEST RESULTS**

<u>S.</u> No.	<u>Parameters</u>	Unit (SI)		Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	μg /m³		32	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	μ <b>g</b> /m³	:	12	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	μg /m³	:	7.08	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>X</sub> )	μ <b>g</b> /m³	:	15.18	80	IS 5182 (Part 6): 2006

Remark:

**Authorized By** 

Name : Bhavisha Pandya

**Designation: Sr.Chemist** 

NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.

 Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.

3) The results reported above relate to the sample identified under Sample Details.

	TEST REPORT FORMAT - AMBIENT				
DOC. NO.: LAB-FMT-051	Issue No.: 01	Revision No.: 00			
Effective Date:. 26.03.2024	Issue Date: 26.03.2024	Revision Date:			

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

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# **LABORATORY TEST REPORT - AMBIENT**

**REPORT NO.: APR24/047/07** 

### **SAMPLE DETAILS**

1.	Name & Address of Clie										
				ighway	/, la	aluk	luka – Waghodia, Dist. – Vadodara 391510				
2.	Sample ID: 21484582	46– 04	7AP24AQ01		3		Client Rep	resentative: Mi	.Lawrand	ce Gonsalves	
4.	Sampling Date: 05.04.2				5		Sampling	Location: Nr. M	ain Gate		
6.	Sampling time: 11:30 h	hr			7		Sampling Duration: 24 Hrs				
8.	Analysis commenced o	n: 08.0	08.04.2024				Analysis Completed on: 08.04.2024				
10.	Reporting Date: 19.04.	2024				١.	Discipline:	Chemical			
12.	Sample Collected By: M	1r.Gaur	ang		13	3.	Group: At	mospheric Pollu	ition		
14.	Sampling Procedure: IS	S Metho	od		15	5.	Product: A	Ambient Air			
16.	Description of Sample:		Sampling Bottles:	Sealed	1 1	F	ilter Paper	: Packed √	Blado	der: Clamped √	
17.	<b>Environment Condition</b>	1:	Temp: Normal Humio		dity:	Lo	W	Wind speed: Sm	ooth	Cloud cover: Partly Cloudy	
	Rain: No Rain	Wind	find Direction: Up wind			Wi	nd blowing t	from: SE	Station of	category: Industrial	
18.	Sample Received Date	: 08.04	1.2024			-					

### **TEST RESULTS**

<u>S.</u> No.	<u>Parameters</u>	Unit (SI)		<u>Results</u>	Specification/SPCB Norms/ BIS Standards	Method Used
1.	co	mg/m³	:	0.778	02	Gas Chromatography
Rema Author	rk : rized By -					
Name	: Bhavisha Pandya			Designati	on : Sr.Chemist	

NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.

 Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.

3) The results reported above relate to the sample identified under Sample Details.

	TEST REPORT FORMAT - AMBIENT	
DOC. NO.: LAB-FMT-051	Issue No.: 01	Revision No.: 00
Effective Date:. 26.03.2024	Issue Date: 26.03.2024	Revision Date:



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10. Phone : **(O) 0265 - 6131000, 6131001** 



## **ENVIRONMENTAL MONITORING REPORT**

# **LABORATORY TEST REPORT – AMBIENT**

REPORT NO.: APR24/047/06 (ULR- TC709924000008157F)

### **SAMPLE DETAILS**

	Rain: No Rain	Wind	d Direction: Down wi	ind	1	Win	d blowing	from: SE	Station	category: Industrial
17.	Environment Conditio	n:	Temp: Normal	Humic	lity:	Lov	V	Wind speed: Sr	nooth	Cloud cover: Partly Cloudy
16.	Description of Sample		Sampling Bottles	: Sealed	√	Fil	lter Paper	: Packed √	Blade	der: Clamped √
14.	Sampling Procedure: I	S Met	nod		15.	.	Product: A	Ambient Air		
12.	Sample Collected By: I	Mr.Gau	ırang		13.	. (	Group: At	mospheric Poll	ution	
10.	Reporting Date: 19.04	.2024			11.	. [	Discipline: Chemical			
8.	Analysis commenced of	red on: 08.04.2024			9.	/	Analysis Completed on: 08.04.2024			24
6.	Sampling time: 12:00	oling time: 12:00 hr			7.		Sampling	Duration: 24 H	Irs	
4.	Sampling Date: 05.04.				5.	9	Sampling	Location: Nr. 9	STP Area	
2.	Sample ID: 21484582				3.	(	Client Rep	oresentative: M	r.Lawran	ce Gonsalves
1.			:: M/s. Birla Copper Asoj Priva soj, Vadodara Halol Highway,					odia, Dist. – Va	dodara	391510

## **TEST RESULTS**

<u>S.</u> No.	Parameters Unit (SI			Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	μ <b>g</b> /m³	:	33	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	μg /m³	:	16	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	μg /m³	:	8.29	80	IS 5182 (Part 2): 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	μg /m³	:	12.56	80	IS 5182 (Part 6): 2006

Remark:

Authorized By

Name : Bhavisha Pandya

Designation : Sr.Chemist

NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.

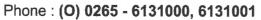
Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.

3) The results reported above relate to the sample identified under Sample Details.

e relate to the sample identified thider Sample Details.

	TEST REPORT FORMAT - AMBIENT	
DOC. NO.: LAB-FMT-051	Issue No.: 01	Revision No.: 00
Effective Date:. 26.03.2024	Issue Date: 26.03.2024	Revision Date:

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.







## **LABORATORY TEST REPORT - AMBIENT**

### **REPORT NO.: APR24/047/08**

#### **SAMPLE DETAILS**

	Rain: No Rain	Wind	Direction: Down wind	d	٧	Vind blowing 1	from: SE	Station ca	tegory: Industrial
17.	Environment Condition	1:	Temp: Normal	Humic	ity: L	_OW	Wind speed: Sm	ooth	Cloud cover: Partly Cloudy
16.	Description of Sample:		Sampling Bottles:	Sealed	√	Filter Paper	: Packed √	Bladde	er: Clamped √
14.	Sampling Procedure: I	S Meth	od		15.	Product: A	Ambient Air		
12.	Sample Collected By: I	1r.Gau	rang		13.	Group: At	mospheric Pollu	tion	
10.	Reporting Date: 19.04	2024			11.	Discipline:	Chemical		
8.	Analysis commenced on: 08.04.2024				9.	Analysis C	ompleted on: 0	8.04.2024	
6.				7.	Sampling	Duration: 24 Hr	s		
4.	Sampling Date: 05.04.2024			5.	Sampling	Location: Nr. S	ΓP Area		
2.	Sample ID: 2148458246- 047AP24AQ02				3.	Client Rep	resentative: Mr	.Lawrance	e Gonsalves
1.	Name & Address of Cli Survey No. 21, Village						odia, Dist. – Vad	lodara 3	91510

### **TEST RESULTS**

<u>S.</u> No.	<u>Parameters</u>	Unit (SI)		<u>Results</u>	Specification/SPCB Norms/ BIS Standards	Method Used
1.	со	mg/m³	31	0.606	02	Gas Chromatography
Rema Author	rk : rized By -					
Name	: Bhavisha Pandya			Designati	on : Sr.Chemist	

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

	TEST REPORT FORMAT - AMBIENT	
DOC. NO.: LAB-FMT-051	Issue No.: 01	Revision No.: 00
Effective Date: 26.03.2024	Issue Date: 26.03.2024	Revision Date:



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

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## **ENVIRONMENTAL MONITORING REPORT**

### **LABORATORY TEST REPORT - EFFLUENT**

REPORT NO.: APR24/047/09 (ULR-TC709924000008158F)

### **SAMPLE DETAILS**

		27 MINI 6-6-	BETAILO
1.	Name & Address of Client: M/s. Birla Coppe Survey No. 21, Village - Asoj, Vadodara Hal		ivate Limited. ay, Taluka – Waghodia, Dist. – Vadodara 391510
2.	Sample ID: 2148458246 047AP24EF01	3.	Client Representative: Mr.Lawrance Gonsalves
4.	Sample Date: 06.04.2024	5.	Sample Collected By: Mr.Gaurang
6.	Analysis commenced on: 08.04.2024	7.	Analysis Completed on: 15.04.2024
8.	Reporting Date: 19.04.2024	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed √	11.	Group: Pollution and Environment
12.	Sampling Location: STP Inlet	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 08.04.2024

### **TEST RESULTS**

<u>S.No.</u>	Parameters	Unit (SI)		Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pН		:	7.35	N.A	APHA 23rd Edition 4500-H+ B
2.	BOD (3 days at 27 °C)	mg/L	:	38	N.A	IS 3025 (Part 44): 1993
3.	Suspended Solids	mg/L	12	28	N.A	APHA 23rd Edition 2540 D

Name : Bhavisha Pandya
NOTE: 1) Reports

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- Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.

Designation : Sr.Chemist

3) The results reported above relate to the sample identified under Sample Details.

TEST REPORT FORMAT- EFFLUENT					
DOC. NO.: LAB-FMT-050	Issue No.: 01	Revision No.: 00			
Effective Date: 26.03.2024	Issue Date: 26.03.2024	Revision Date:			



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10. Phone: (O) 0265 - 6131000, 6131001



### **ENVIRONMENTAL MONITORING REPORT**

# **LABORATORY TEST REPORT - MICROBIOLOGY**

REPORT NO.: APR24/047/19(ULR- TC709924000008164F)

### **SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Birla Copper A Survey No. 21, Village - Asoj, Vadodara Halol	dress of Client: M/s. Birla Copper Asoj Private Limited. 21, Village - Asoj, Vadodara Halol Highway, Taluka – Waghodia, Dist. – Vadodara 391510					
2.	Sample ID: 2148458246- 047AP24EF01	8.	Client Representative: Mr.LawranceGonsalves				
3.	Sample Date: 06.04.2024	9.	Sample Collected By: Mr.Gaurang				
4.	Packing Condition & Quantity: Sealed √	10.	Discipline: Biological				
5.	Analysis commenced on: 08.04.2024	11.	Group: Environment & Pollution				
6.	Analysis Completed on: 10.04.2024	12.	Product: STP Inlet				
7.	Reporting Date: 19.04.2024	13.	Sampling Method: IS 1622				
14.	Sampling Location: STP Inlet	15.	Sample Received Date:08.04.2024				

### **TEST RESULTS**

<u>S.No.</u>	<u>Parameters</u>	<u>Results</u>	<u>Unit (SI)</u>	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Fecal Coliform	>1600	: MPN/100ml	N.A.	APHA: 23 <sup>rd</sup> Edition (9221 C,E)
2.	E.coli	Present	: /100ml	N.A.	APHA 23 <sup>rd</sup> Edition(9221 B, G)
Remar Nuthor	ks:	(AL)			
Name:	Priyanka Kotak		D	esignation: Microbiologi	st

-----END OF REPORT-----

NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.

2) Re-sampling may be done, if required, with written approval of the laboratory.

3) The results reported above relate to the sample identified under Sample Details.

**TEST REPORT FORMAT - MICROBIOLOGY** DOC, NO.: LAB-FMT-217 Issue No.: 01 Revision No.: 00 Effective Date: . 26.03.2024 Issue Date: 26.03.2024 Revision Date: --



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
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### **ENVIRONMENTAL MONITORING REPORT**

### **LABORATORY TEST REPORT - EFFLUENT**

REPORT NO.: APR24/047/10 (ULR- TC709924000008159F)

### SAMPLE DETAILS

		WINI FF	DETAILS				
1.	Name & Address of Client: M/s. Birla Copper Asoj Private Limited.						
	Survey No. 21, Village - Asoj, Vadodara Halo	l Highw	ay, Taluka – Waghodia, Dist. – Vadodara 391510				
2.	Sample ID: 2148458246- 047AP24EF02	3.	Client Representative: Mr. Lawrance Gonsalves				
4.	Sample Date: 06.04.2024	5.	Sample Collected By: Mr.Gaurang				
6.	Analysis commenced on: 08.04.2024	7.	Analysis Completed on: 15.04.2024				
8.	Reporting Date: 19.04.2024	9.	Discipline: Chemical				
10.	Packing Condition & Quantity: Sealed √	11.	Group: Pollution and Environment				
12.	Sampling Location: STP Outlet	13.	Product: Waste Water				
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 08.04.2024				

#### **TEST RESULTS**

S.No.	<u>Parameters</u>	Unit (SI)		Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	рН		:	7.31	N.A	APHA 23rd Edition 4500-H+ B
2.	BOD (3 days at 27 °C)	mg/L	:	14	N.A	IS 3025 (Part 44): 1993
3.	Suspended Solids	mg/L	:	10	N.A	APHA 23rd Edition 2540 D

### Remark:

Authorised By

Name : Bhavisha Pandya

Effective Date:. 26.03.2024

Designation : Sr.Chemist

- Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

DOC. NO.: LAB-FMT-050 Issue No.: 01 Revision No.: 00

Issue Date: 26.03.2024

Revision Date: --



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.
Phone: **(O) 0265 - 6131000, 6131001** 



### **ENVIRONMENTAL MONITORING REPORT**

# **LABORATORY TEST REPORT - MICROBIOLOGY**

REPORT NO.: APR24/047/20 (ULR-TC709924000008165F)

## **SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Birla Copper Aso Survey No. 21, Village - Asoj, Vadodara Halol Hig	Private	e Limited. Taluka – Waghodia, Dist. – Vadodara 391510
2.	Sample ID: 2148458246- 047AP24EF02	8.	Client Representative: Mr.Lawrance Gonsalves
3.	Sample Date: 06.04.2024	9.	Sample Collected By: Mr.Gaurang
4.	Packing Condition & Quantity: Sealed √	10.	Discipline: Biological
5.	Analysis commenced on: 08.04.2024	11.	Group: Environment & Pollution
6.	Analysis Completed on: 10.04.2024	12.	Product: STP Outlet
7.	Reporting Date: 19.04.2024	13.	Sampling Method: IS 1622
14.	Sampling Location: STP Outlet	15.	Sample Received Date: 08.04.2024

### **TEST RESULTS**

S.No.	<u>Parameters</u>	Results	Unit (SI)	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Fecal Coliform	920	: MPN/100ml	<1000	APHA: 23rdEdition (9221 C,E)
2.	E.coli	Present	: /100ml	N.A.	APHA 23rd Edition(9221 B, G)

Name: Priyanka Kotak

**Designation: Microbiologist** 

NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.

2) Re-sampling may be done, if required, with written approval of the laboratory.

3) The results reported above relate to the sample identified under Sample Details.
-----END OF REPORT------

 TEST REPORT FORMAT - MICROBIOLOGY

 DOC. NO.: LAB-FMT-217
 Issue No.: 01
 Revision No.: 00

 Effective Date: 26.03.2024
 Issue Date: 26.03.2024
 Revision Date: -



### **KADAM LABS PRIVATE LIMITED**

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10. Phone: (O) 0265 - 6131000, 6131001



#### **ENVIRONMENTAL MONITORING REPORT**

#### **LABORATORY TEST REPORT - WATER**

#### REPORT NO.: APR24/047/24 (ULR- TC134502400001418F)

#### **SAMPLE DETAILS**

		7 MIVIT EL	BETALO			
1.	Name & Address of Client: M/s. Birla Copper Asoj Private Limited. Survey No. 21, Village - Asoj, Vadodara Halol Highway, Taluka – Waghodia, Dist. – Vadodara 391510					
2.	Sample ID: 2148458246- 047AP24W05	3.	Client Representative: Mr.Lawrance Gonsalves			
4.	Sample Date: 06.04.2024	5.	Sample Collected By: Mr.Gaurang			
6.	Analysis commenced on: 08.04.2024	7.	Analysis Completed on: 15.04.2024			
8.	Reporting Date: 19.04.2024	9.	Discipline: Chemical			
10.	Packing Condition & Quantity: Sealed √	11.	Group: Water			
12.	Sampling Location: RO Reject	13.	Product: RO Reject Water			
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 08.04.2024			

TEST DESILITE

<u>S.</u> <u>No.</u>	<u>Parameters</u>	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	pH		7.34	N.A	APHA 23rd Edition 4500-H+ B
2.	Turbidity	NTU	<0.1	N.A	APHA 23rd Edition 2130- B
3.	Colour	Pt-CO	<1	N.A	APHA 23rd Edition 2120 B
4.	Sulphates	mg/L	192	N.A	APHA 23rd Edition 4500 SO4 E
5.	Fluoride	mg/L	0.87	N.A	APHA 23rd Edition 4500 F-D
6.	Nitrate	mg/L	4.86	N.A	IS 3025 (Part 34) (ii): 1988
7.	Phenol	mg/L	< 0.001	N.A	APHA 23rd Edition 5530 D
8.	Aluminum	mg/L	< 0.01	N.A	APHA 23rd Edition 3125 B
9.	Hexa Chromium	mg/L	<0.02	N.A	APHA 23rd Edition 3500 Cr - B
10.	Arsenic	mg/L	< 0.001	N.A	APHA 23rd Edition 3125 B
11.	Boron	mg/L :	< 0.01	N.A	APHA 23rd Edition 3125 B
12.	Total Dissolved Solids	mg/L :	1836	N.A	APHA 23rd Edition 2540 C
13.	Alkalinity	mg/L :	640	N.A	APHA 23rd Edition 2320 B
14.	Total Hardness	mg/L :	690	N.A	APHA 23rd Edition 2340 C
15.	Calcium	mg/L :	152	N.A	APHA 23rd Edition 3500 - Ca B
16.	Magnesium	mg/L :	97	N.A	APHA 23rd Edition 3500 - Mg B
17.	Residual Chlorine	mg/L :	<0.1	N.A	IS 3025 (Part – 26): 1986
18.	Chlorides	mg/L :	1004	N.A	APHA 23rd Edition 4500 Cl B
19.	Cadmium	mg/L :	<0.001	N.A	APHA 23rd Edition 3125 B
20.	Copper	mg/L :	<0.001	N.A	APHA 23rd Edition 3125 B
21.	Lead	mg/L :	< 0.001	N.A	APHA 23rd Edition 3125 B
22.	Iron	mg/L :	<0.006	N.A	APHA 23rd Edition 3125 B
23.	Zinc	mg/L :	<0.003	N.A	APHA 23rd Edition 3125 B
24.	Manganese	mg/L :	<0.001	N.A	APHA 23rd Edition 3125 B
25.	Mercury	mg/L :	< 0.001	N.A	APHA 23 <sup>rd</sup> Edition 3125 B

Remark:

Authorised By -Name : Sapana Amin NOTE:

Designation: Lab Incharge

1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.

Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.

3) The results reported above relate to the sample identified under Sample Details.

----END OF REPORT---

	TEST REPORT FORMAT - WATER	
DOC. NO.: LAB-FMT-055	Issue No.: 01	Revision No.: 00
Effective Date: 26.03.2024	Issue Date: 26.03.2024	Revision Date:

### **KADAM LABS PRIVATE LIMITED**

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

Phone: (O) 0265 - 6131000, 6131001





#### **LABORATORY TEST REPORT - WATER**

**REPORT NO.: APR24/047/25** 

#### **SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Birla Copper Asoj Private Limited. Survey No. 21, Village - Asoj, Vadodara Halol Highway, Taluka – Waghodia, Dist. – Vadodara 391510				
2.	Sample ID: 2148458246 - 047AP24W05	3.	Client Representative: Mr.Lawrance Gonsalves		
4.	Sample Date: 06.04.2024	5.	Sample Collected By: Mr.Gaurang		
6.	Analysis commenced on: 08.04.2024	7.	Analysis Completed on: 15.04.2024		
8.	Reporting Date: 19.04.2024	9.	Discipline: Chemical		
10.	Packing Condition & Quantity: Sealed √	11.	Group: Water		
12.	Sampling Location: RO Reject	13.	Product: RO Reject Water		
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 08.04.2024		

#### **TEST RESULTS**

<u>S.</u> No.	<u>Parameters</u>	Unit (SI)		<u>Results</u>	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Odour	-	1:1	Agreeable	N.A	APHA: 23rd Edition 2150 B
2.	Cyanide	mg/L	1:	<0.05	N.A	APHA: 23rd Edition 4500 CN E

Authorised By

Name : Bhavisha Pandya

Designation: Sr.Chemist

1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.

 Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.

3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - WATER					
DOC. NO.: LAB-FMT-055	Issue No.: 01	Revision No.: 00			
Effective Date: 26.03.2024	Issue Date: 26.03.2024	Revision Date:			



#### BEIL INFRASTRUCTURE LIMITED

(Formely Known As Bharuch Enviro Infrastructure Limited)

21<sup>ST</sup> NOVEMBER, 2022

TO, BIRLA COPPER ASOJ PRIVATE LIMITED PLOT NO.28/1, VILL - ASOJ, NR. KEMROCK, BARODA - HALOL HIGHWAY, TA - WAGHODIA, DIST - VADODARA.

**Sub: Membership Certificate for Common Incineration Facility.** 

Dear Sir,

We hereby certify that you have become member for the common incineration facility of **BEIL INFRASTRUCTURE LIMITED** (FORMERLY KNOWN AS BHARUCH ENVIRO INFRASTRUCTURE LTD), at GIDC, Ankleshwar & Dahej. You have booked quantity of **10 MT/Year**. You have paid Registration fees for common incinerator membership. Your Membership No. is **CI/OBD/333**.

Waste will be accepted after submitting valid authorization of GPCB.

Thanking you,

Yours faithfully,

For, BEIL INFRASTRUCTURE LIMITED

AUTHORISED SIGNATORY



#### BEIL INFRASTRUCTURE LIMITED

(Formely Known As Bharuch Enviro Infrastructure Limited)

21<sup>ST</sup> NOVEMBER, 2022

TO, BIRLA COPPER ASOJ PRIVATE LIMITED PLOT NO.28/1, VILL - ASOJ, NR. KEMROCK, BARODA - HALOL HIGHWAY, TA - WAGHODIA, DIST - VADODARA.

Sub: Membership Certificate for Common Solid Waste Disposal Facility.

Dear Sir,

We hereby settify that you have become member for the common Solid/Hazardous waste disposal facility developed by **BEIL INFRASTRUCTURE LIMITED** (Formerly known as Bharuch Enviro Infrastructure Ltd), at GIDC, Dahej. You have booked solid waste quantity of **3.8 MT/Year**. You have also paid your capacity commitment charges. Your Membership No. is **OTH/1067**.

Waste will be accepted after submitting valid authorization of GPCB.

1) Total TSDF Capacity of BEIL Dahej: 1900000 MT

2) Total Consented Capacity: 1900000 MT 3) Total Occupied Capacity: 920264.023 MT

4) Spare Capacity: 979735.97 MT

Thanking you,

Yours faithfully,

For, BEIL Infrastructure Limited (Formerly Known as Bharuch Enviro Infrastructure Ltd)

**AUTHORISED SIGNATORY** 

CIN No.: U45300GJ1997PLC032696



### **GUJARAT POLLUTION CONTROL BOARD**

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar-382 010

Phone : (079) 23226295 Fax : (079) 23232156

Website: www.gpcb.gov.in

BY R.P.A.D.

Consolidated Consent & Authorization (CC&A) Amendment
AWH-120701

No: GPCB/CCA-VRD-1888/ID:52688/ 3 09 19

20/2/2022

To,

M/s. Birla Copper Asoj Pvt. Ltd.

**ANNEXURE 3** 

Plot No:28/1, Vill: Asoj,

Nr. Kemrock, Baroda- Halol Highway,

Ta: Waghodia, Dist: Vadedara.

Sub: Amendment to Consolidated Consent & Authorization (CC&A) Under Water Act, 1974, Air Act, 1981 And Hazardous And Other Waste (Management And Transboundary Movement) Rules-2016 Framed Under Environment (Protection) Act, 1986.

Ref: 1) Your online CCA- amendment application no. 257190 dated 22/05/2022.

2) CCA order no. AWH-102752 dated 05/07/2019.

3) CTF order No. 115360, dated 26/11/2021.

Sir.

This has reference to the CCA order no. AWII-102752 dated 05/07/2019 issued vide letter no. GPCB/CCA-VRD-4034/ID:52688/515323 dated 30/07/2019 under the provisions of the Water Act- 1974, Air Act- 1981 and Hazardous And Other Waste (Management And Transboundary Movement) Rules-2016 framed under Environmental (Protection) Act 1986.

#### SPECIFIC CONDITION:

- 1. Applicant shall obtain Environment Clearance (EC) relating to Metallurgical Industries as per EIA Notification, 2006 and informed to the Board.
- 2. Applicant shall obtain TOR (Terms Of Reference) within 3 months for existing products.

Reference to your application no. 257190 dated 22/05/2022, the said CCA order is further amended as under:

1. Product list mentioned at condition no. 2 is amended for addition of following items:

Sr. No.	Products Copper Rod ABC (Annealed Bare Conductor) Wire	 Quantity 19000 MT/Month 5000 MT/Month
		2000 IN PARTONILL

- 2. The condition no.4.1, 4.2 and 4.3 of CCA order are replaced and shall be read as under:-
- (4.1) The total quantity of the industrial effluent to be generated from the manufacturing process and other ancillary industrial operations shall be not exceed 37 KL/Day after expansion, which shall be utilize for gardening purpose within premises after meeting with following prescribed norms.

GPCB ID:52688

1 of 4

Clean Gujarat Green Gujarat

ISO - 9001 - 2008 & ISO - 14001 - 2004 Certified Organisation

1	2	3	
Sr.No.	Parameters	GPCB Norms	
1.	plI	6.5 to 8.5	
2.	Temperature	40 °C	
3.	Colour (pt.co.scale) in units	100 units	
4.	Suspended Solids	100 mg/l	
5.	Oil and Grease	10 mg/l	
6.	Sulphides	0.5 mg/l	
7.	Ammonical Nitrogen	50 mg/l	
8.	BOD (5 days at 20°C)	30 mg/l	
9.	COD	100 mg/l	
10.	Chlorides	600 mg/l	
11.	Sulphates	1000 mg/l	
12.	Total dissolved solids	2100 mg/l	
13.	Sodium absorption ratio	26	

- All efforts shall be made to remove color & unpleasant odor as far as practicable
- (4.2) The total quantity the domestic wastewater (sewage) shall not exceed 6.5 KL/Day.
- (4.3) Sewage shall be treated separately in Sewage Treatment Plant (STP) to conform to the following standards and utilized scientifically on land for irrigation/plantation/gardening within the factory premises and or utilize for flushing in toilets within premises.

Parameter	Permissible Limit
pH	5.5 to 9
BOD (5days at 20oC)	Less than 10mg/l
COD	< 50 mg/l
Total Suspended Solids	< 20mg/l
Nitrogen - Total	< 10 mg/l
Phosphorus - Total	< 1 mg/l
Fecal Coliform (FC)	Desirable: < 100
Most Probable Number per 100 milliliters, MPN/100ml	Permissible : < 230

- 3. The condition no.5.1 of CCA order are replaced and shall be read as under:-
- (5.1) The following shall be used as fuel in various utilities respectively.

Sr. No	Fuel	Quantity
1	Natural Gas	35000 SCM/Day
2	HSD	100 Lit/hr

GPCB ID:52688 2 of 4



### **GUJARAT POLLUTION CONTROL BOARD**

PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar-382 010

Phone: (079) 23226295 Fax : (079) 23232156

Website: www.gpcb.gov.in

4 The hazardous waste table mentioned at condition no.7.4 of CCA order is amended/replaced and shall be read as under-

	ded/replaced and shall l	The state of the s	
Sr.	Category of	Authorized Mode of disposal	Quantity
No	Hazardous waste as		
1.	per the Schedules 5.1 - Schedule-1	Congretion Collection Standard	
1.	(Used Spent Oil)	Generation, Collection, Storage, Transportation and Disposal by selling to registered/authorized refiner having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and xgn generated manifest.	6 MT/Year
2	5.2 Schedule-I (Oil Contaminated cotton & Cloth waste)	Generation, Collection. Storage, Transportation and Disposal to authorized CHWIF for co-processing/incineration having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and xgn generated manifest.	6 MT/Year
3	33.1- Schedule-I (Empty Containers & Barrels)	Generation, Collection, Storage, Transportation and Disposal by selling to registered /authorized re-cycler having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and xgn generated manifest.	10 MT/Year
4	5.2 Schedule-1 (Emulsion)	Generation, Collection, Storage, Transportation and Disposal to approved recyclers having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and xgn generated manifest.	200 MT/Year
5	B2010 (Waste Graphite Solution)	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF for land filling having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and xgn generated manifest.	75 MT/Year
6	35.2-Schedulc-I (Used Resins)	Generation. Collection, Storage, Transportation and Disposal to common TSDF site/co-processing facility for land filling having valid CCA of GPCB & permission under HWM Rule-2016 by use of GPS enable vehicle and xgn generated manifest.	1 MT/Year

GPCB ID:52688

3 of 4

7	3 Schedule-IV (Copper Oxide mill scale)	Generation, Collection, Storage, Transportation and Disposal to registered recycler having valid CCA of GPCB by use of GPS enable vehicle and xgn generated manifest.	325 MT/Year
8	4 Schedule-I (Copper reverts, cake and residue)	Generation, Collection, Storage, Transportation and Disposal to registered recycler having valid CCA of GPCB by use of GPS enable vehicle and xgn generated manifest.	3 MT/Year
9	2 -Schedule-I (Slag from Copper dross)	Generation, Collection, Storage, Transportation and Disposal to registered recycler having valid CCA of GPCB by use of GPS enable vehicle and xgn generated manifest.	115 MT/Year
10	Z-Z37 (Used Membrane/filter cloth and bags)	Generation, Collection, Storage, Transportation and Disposal to authorized CHWIF having valid CCA of GPCB by use of GPS enable vehicle and xgn generated manifest.	0.4 MT/Year
11	X-X02 (Used Insulation)	Generation. Collection. Storage, Transportation and Disposal to authorized CHWIF having valid CCA of GPCB by use of GPS enable vehicle and xgn generated manifest.	3.8 MT/Year

5. All other conditions of CCA order no. AWH-102752 dated 05/07/2019 issued vide letter no. GPCB/CCA-VRD-4034/ID:52688/515323 dated 30/07/2019 shall remain unchanged.

For and on behalf of Gujarat Pollution Control Board

(D.P. Shah)

Senior Environmental Engineer

GPCB ID:52688 4 of 4



19.08.2023

To, The Chief Conservator of Forest, "Aranya Bhavan", Near CH-3 Circle, Sector-10 A, Gandhinagar - 382010 Gujarat.

Sub: Conservation plan approval for Copper Rod and ABC (Annealed Bare Conductor) Wire Manufacturing Unit in Survey No 21, Village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat, India by M/s. Birla Copper Asoj Pvt. Ltd

Dear Sir,

We, M/s. Birla Copper Asoj Pvt. Ltd, has submitted the EC application for Copper Rod and ABC (Annealed Bare Conductor) Wire Manufacturing Unit in Survey No 21, Village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat, India.

The proposed project is classified as Category B project and falls under project or Activity 3 (a) Metallurgical Industries (ferrous & non-ferrous) as per the EIA notification dated September 14, 2006 and its amendments.

To meet the requirement of ToR granted by SEIAA Gujarat, we have to submit the Conservation plan for Schedule I species.

We request you to kindly consider the attached conservation plan with a budget and approve the same at the earliest.

Thanking You,

Yours Faithfully

Authorized Signatory

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Olegano Conservator or Econeste
Pri Middle Conservator or



#### **BIRLA COPPER ASOJ PRIVATE LIMITED**

Document ID:

BCA/HR/F/08

Rev. No.: 01

Issued Date: 11/01/2022

#### **Attendance and Evaluation Record**

Training No. :

Venue

: Board goom

Date & Time : 27.03.2024 & 9:30 to 5:00 PM

Subject : BBS

Conducted By: Anway Trepathi

Sr.					Training Evaluation Marks
lo.	Employee Code	Name of Person	Department	Signature	Skill Level
1	910065	Adoush (noswarni	OC	Aug	(b)
2	910099	Harshita Jam.	Quality	HAZ .	(Li)
3	Letotp	UDIG SUKHOVOM	Finance	33	Ü
4	910128	Divyesh Nashi	Production	Herte Brygon	3
5	910137	Paras Singh Chausan	hounc for	Parabolish	3
6	910125	Bhaviya Kiran	Mechanical -	( Warring )	(3)
7	910046	Paresh Nayadian	RMF4	40	(3)
8	910037	Velsaj. A	FAI	Weby	W
9	910019	Rang Juinil.	88 I	Jedu	<b>w</b>
0	910020	Kher Nikunisinh	Quality	odret.	3
11	910042	Drownaningain Jedeja	Mechanical	2/03/24	(3)
12	910095	Lawrance Gonsalus	GHS	Gonsalmy	(1)
13	911154	Kalha Ralled	EHS	Kaltha	(0)
4	910101	Varrencijsinh	HR & Admin	you you	- (W)
15	910139	Hiray Mangroliya	Store	tim	3
16	90112	Pruthviraj Solanki	Production	Sanger	3
17	910057	Rahul Upadhayay	Bodulos	Zahry	4 3
		, 00		Sign :	12 Garseling
			Evaluation By	Name :	Laurance Gonsams
			ning Evaluation	Date :	2703 24

1. Failing to meet Performance Expectations

2. Not fully meeting Performance Expectations

3. Meeting performance expectations

4. Offen exceeds Performance Expectations

5. Consistantly exceeds Performance Expectations



#### **BIRLA COPPER ASOJ PRIVATE LIMITED**

**Document ID:** 

BCA/HR/F/08

Rev. No.: 01

Issued Date: 11/01/2022

#### **Attendance and Evaluation Record**

Training No. :

Subject

Venue : Board Room / Admin Building.

Date & Time : 27.3.2024; 9:30 a.m. t. 5.00 p.m.

BBS

Conducted By: Mr Anuras Tripathi

Sr.					Training Evaluation Marks
No.	Employee Code	Name of Person	Department	Signature	Skill Level
1	910117	Dhamlshtha Rung	Ruchere	94	3
2	910809	Jagrifsinh Thaley	HR	Tregule	
3	910096	Tagrifsinh Thalog Problant Shewast	II (	Resourch	B
4				5 %	
5					
6		15 member	s had	attended	baining
7		online			
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
				Sign :	
		-	Evaluation By	Name :	
				Date :	

1. Failing to meet Performance Expectations

3. Meeting performance expectations

5. Consistantly exceeds Performance Expectations

2. Not fully meeting Performance Expectations

4. Offen exceeds Performance Expectations

							CLINICAL DETAILS			VISION W	ITHOUT GLASS	V	ISION WITH GLASS				BLOOD REPORTS		URINE RE	PORTS		AUDI	OMETRY
SR.NO	EMPLY. CODE	EMPLOYEE NAME	DESIGANTION		GENDER DATE H			ALLERGY ADDICTION	B.P PULSE	KIGHI	FT NEAR RIGHT NEAR L	KIGHI	ISTANT LEFT NEAR RIGHT	NEAR LEFT COLOUR BLIND	HAEMOGLOBIN	WBC COUNT		CREATININE	PROTEIN GLUCOSE PUS CELLS			RIGHT EAR	LEFT EAR
2	910047	Vinay Krishna Jaydipkumar Raulaji	Senior Engineer Deputy Engineer	Electrical Maintenance 37	M 07.03.2024 M 07.03.2024	156 65	NIL NIL NIL NIL	NIL NIL 1	0/80 79	6\6 6\6 6\6 6\6	N \6 N \	6 NA	NA NA	NA No NA No	14.3 14.8	10910 7950	198000 99.6 <b>45.2</b> 257000 89.6 28.1	0.85 1.02	Nil Nil Occasional/hp		Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing
4	911007	Mahendrabhai Manabhai Bhaliya Yogeshkumar Bhallalbhai Parmar	Helper Helper		M 07.03.2024		NIL NIL NIL NIL	NIL NIL 1	8/80 74 0/84 81	6\6 6\6 6\6 6\6	N \6 N \ N \6 N \		NA NA NA NA	NA No	16.6 15.6	9730 11500	224000 88.5 30.3 245000 85.6 21 230000 86.6 26.9	0.85	Nil Nil Occasional/hp Nil Nil 1-3/hpf	Absent Occational/hp Absent 2 - 4/hpf	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
6	910124	Gautambhai Bhailalbhai Bhaliya JITENDRASINH D PARMAR Kamleshbhai Kanchanbhai Nayak	DEPUTI OFFICER Helper	RMFG 31	M 07.03.2024 M 07.03.2024 M 07.03.2024	168 75	NIL NIL NIL	NIL NIL 1	6/82 76 6/80 77 0/70 74	6 \ 6 \ 6 \ 6 \ 6	N\6 N\	6 NA	NA NA	NA NO	13.4	9940	320000 99.5 21.7 226000 116.6 26	0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
8 9	911123 23417	MAHESH H PARMAR SANJAYBHAI RATHVA	ASSISTANT Forklift Op.	RMFG 28	M 07.03.2024 M 07.03.2024 M 07.03.2024	162 48			0/70 71	6\6 6\6	N \6 N \	6 NA 6 NA	NA NA	NA No NA No	12.6 13.6	5490 8070	220000 125.5 22.5 273000 119.6 24.7	0.69	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
10	910134 23409	Pragnesh Rana DIPTIRANJAN KHAMARI	Junior Engineer Forklift Op.	Mechanical Maintenance 26		166 66 169 78	NIL NIL NIL NIL NIL NIL		0/80 75 6/80 73	6\6 6\6 6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No NA Yes (Partial)	11.8 14.6	8790 10310	198000 95.6 29.8 272000 89.6 28.5	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
11 12 13		GAMBHIR KALROLIYA AKSHAYA BHOI Jainil Narendra Rana	Forklift Op. Forklift Op. Senior Engineer	39 22	M 07.03.2024 M 07.03.2024	164 61 159 70	NIL NIL NIL NIL	NIL TOBACCO CHEWING 12 NIL NIL 12	8/80 78 0/70 74	6 \ 9 6 \ 9 6 \ 6 6 \ 6	N \24 N \ N \6 N \	24 NA 6 NA	NA NA	NA No NA No	13.1 12.5	8090 12360	198000 95.6 <b>46.9</b> 374000 99.6 25.6	1.02 0.85	Nil Nil Occasional/hp Nil Occasional/hp		Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
14 15	910105	Kiran Patil	Junior Engineer	Mechanical Maintenance 28	M 07.03.2024	170 86 178 86	NIL NIL NIL NIL	NIL NIL 1	8/82 79 0/70 74	6 \ 6 \ 6 \ 6 \ 12 \ 6 \ 12	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No NA No	14 15.2	6840 9220	207000 95.6 25 214000 116.6 22	0.85	Nil Nil Occasional/hp Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing	Normal Hearing Normal Hearing
16 17	910128	Akash Patil Divyesh Vashi	Junior Engineer Junior Engineer	Production 25	M 07.03.2024 M 07.03.2024	170 59	NIL NIL NIL NIL		6/80 76	6\6 6\6	N\6 N\ N\6 N\	6 NA 6 NA	NA NA NA	NA No	12.8 14.3	6110 6910	225000 85.5 28.7 211000 89.6 26.9	0.74	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
18 19		Prabhakar More Apurvsinh Yashvantsinh Vaghela Shaileshbhai Jagdishbhai Parmar	Junior Engineer Helper Electician		M 07.03.2024 M 07.03.2024 M 07.03.2024		NIL         NIL         NIL           NIL         NIL         NIL           NIL         H/O Angioplasty         On Medication for Heart Disease	NIL NIL 10	0/70 73 6/70 68 8/80 79	6 \ 18 6 \ 18 6 \ 60 6 \ 60	N\6 N\ N\6 N\	6 6\6	6 \ 6 N \ 6	N \ 6 No	13.4	10280 9640	243000 99.6 28.3 178000 136.6 22	0.85	Nil Nil Occasional/hp Nil Nil 1-3/hpf Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
21 22		RAJKISHOR PRADHAN BARIA RAJESHBHAI	Forklift Op. Helper	22		164 64 167 64	NIL NIL NIL NIL	NIL NIL 1	0/80 79 0/70 73	6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA NA NA	NA No NA No	14 13.1	5530 8450	198000 114.5 26.6 311000 105.5 22.1	0.85	Nil Nil Occasional/hg Nil Nil Occasional/hg Nil Nil Occasional/hg	Absent Occational/hp Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
23 24	23424 23460	BARIA AJAYKUMAR PATEL VIPULKUMAR	Helper Helper	20	M 07.03.2024 M 07.03.2024	168 42 171 51	NIL NIL NIL	NIL NIL 1	2/70 68 8/70 71	6 \ 6 \ 6 \ 6 \ 6 \ 6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No NA No	11.7 15.5	6190 10250	197000 113.3 22 229000 119.6 18.3	0.74	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
25 26	23434	MANISH KUMAR AVASHTHI DHANKA LALLUBHAI	Forklift Op. Helper	26	M 07.03.2024 M 07.03.2024	169 84 158 47	NIL NIL NIL NIL	NIL TOBACCO CHEWING 1: NIL NIL 10		6 \ 6 \ 6 \ 6 \ 6	N \6 N \	6 NA 6 NA	NA NA	NA No	12.3 13.4	5150 11660	198000 99.8 26 176000 89.6 22.8	0.96 0.88	Nil Nil Occasional/hp Nil Nil 1-3/hpf	Absent 2 - 4/hpf	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Mild High Freq Hearing Loss Normal Hearing
27 28	920057	Dharamraj Vedram Sakiya Hiteshkumar Gambhirsinh Parmar	RBD Operator Helper	RBD 28	M 07.03.2024 M 07.03.2024	163 48	NIL NIL NIL NIL	NIL NIL 1: NIL NIL 1:	8/80 78 0/70 71	6 \ 6 \ 6 \ 6 \ 6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA NA	NA No NA Yes	12.9 15.3	5490 8250	157000 85.6 19.5 241000 86.6 24.5	1.02 0.88	Nil Nil Occasional/hp Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
30	23442 23491 23449	SOLANKI SURSINH PATEL ROHITKUMAR PARMAR HARISHBHAI	Helper Helper Helper	21	M 07.03.2024 M 07.03.2024	173 45	NIL NIL NIL	NIL NIL 1	0/70 71 8/80 76	6\6 6\6	N \6 N \ N \6 N \	6 NA NA	NA NA	NA No	15.8 14.5	9090 11620	260000 99.6 28.1 223000 95.6 36	0.96	Nil Nil Occasional/hg Nil Nil Occasional/hg Nil Nil Occasional/hg Nil Nil Occasional/hg	Absent Occational/hp	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
32 33	23466	DIWAKAR PANDEY CHANDAN KUMAR PANDEY	Forklift Op. Forklift Op.	29	M 07.03.2024 M 07.03.2024 M 07.03.2024	162 66	NIL NIL NIL NIL NIL NIL NIL	NIL NIL 2	4/80 79 0/70 73 4/80 79	6\6 6\6	N\6 N\	6 NA	NA NA	NA No	14.9	6620 5140	198000 89.6 18 198000 95.6 35.6	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
34 35	23479 23445	RANIAN KUMAR PRADHAN THAKOR UPENDRASINH	Forklift Op. Helper	28	M 07.03.2024 M 07.03.2024	160 66		NIL NIL 1	8/80 74 8/70 73	6\6 6\6 6\6 6\6	N \6 N \	6 NA 6 NA	NA NA NA NA	NA No NA No	15.9 12.2	9380 5270	155000 96.6 23.3 198000 126.6 22.8	0.96 0.74	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
36 37	23482 920109	PARMAR HARDIKBHAI Pravinbhai Nanabhai Baria	Helper Helper	Production 30	M 07.03.2024 M 07.03.2024	148 45 164 56	NIL NIL NIL NIL NIL NIL		6/80 79 6/80 73	6\6 6\6 6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No	13.8 11.7	7240 5740	230000 119.6 11.6 285000 95.6 25.8	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
38 39	920112 920092	Ramprasad Katahur Saket Ajitkumar Ganpatbhai Parmar	Helper Helper	Production 30 RBD 25	M 07.03.2024 M 07.03.2024	164 58 160 64	NIL NIL NIL NIL		8/80 77 0/70 73	6\6 6\6 6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No	14.6 14.2	8460 8990	171000 98.5 26.3 298000 86.6 25.4	0.74	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
40 41	920091	Ashok Lakhan Saket Nitinkumar Mavjibhai Bhaliya	Helper Welder	Mech.Maint 24	M 07.03.2024 M 07.03.2024	163 57	NIL NIL NIL NIL	NIL NIL 1	6/80 76 0/80 74	6\6 6\6	N \6 N \ N \6 N \	6 NA	NA NA NA	NA No	15.3 15	6940 10100	191000 99.9 36.5 278000 98.5 25.8	0.69	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
42 43	911019 23465 920092	Kalpeshkumar Arvindbhai Makwana SHANKAR SAW	Helper Supervisor Helper	44	M 07.03.2024 M 07.03.2024	172 59	NIL NIL NIL	NIL TOBACCO CHEWING 1:	0/70 73 0/70 71 9/90 77	6 \ 6 \ 6 \ 6 \ 6 \ 6 \ 6 \ 6 \ 6 \ 6 \	N\6 N\ N\24 N\	0 NA 24 6\6	NA NA 6 \ 6 N \ 6	NA NO N \ 6 NO NΔ NA	16.2 14.3	7870 5980	263000 89.6 26.3 198000 86.6 25.8 330000 116.6 34	0.85 0.85	Nil Nil Occasional/hg Nil Nil Occasional/hg Nil Nil Occasional/hg	Absent Occational/hp	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
		Dipakbhai Chauhan MUNIYA ARVINDBHAI RATHAVA SUNILBHAI	Helper Helper	24	M 07.03.2024 M 07.03.2024 M 07.03.2024	163 49	NIL NIL NIL	NIL NIL 1: NIL NIL 1: NII NII 1:	0/70 73 0/70 73	6\6 6\6	N \6 N \ N \6 N \	6 NA	NA NA	NA No	13.6	9850 5800	214000 98.9 24.6 200000 89.6 26.3	0.95	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
46 47 48	911079	Vasudev Amrutiai Panchai Kaushikgiri Natvargiri Goswami	Electician Electician	Ele.Maint 52	M 07.03.2024 M 07.03.2024	163 57	NIL NIL NIL NIL NIL NIL		6/80 79	6 \ 12 6 \ 12 6 \ 18 6 \ 18	N \36 N \ N \6 N \	36 6\6 6 6\6	6\6 N\6 6\6 N\6	N \ 6 Yes (Partial) N \ 6 No	11.2 13.7	5270 7770	234000 99.6 28.6 207000 116.6 20.7	1.1 0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
49 50	23408 23416	DILLIP PRADHAN RAMESH PARDHAN	Forklift Op. Forklift Op.	29	M 07.03.2024 M 07.03.2024	158 70	NIL NIL NIL NIL	NIL NIL 14	0/86 88 0/70 73	6 \ 6 \ 6 \ 6 \ 6	N \6 N \ N \6 N \	6 NA NA	NA NA	NA No NA No	14.3 14.3	13260 5720	187000 125.6 28.6 198000 116.6 26.3	0.84	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
51 52	23468 910010	MANOJ PRADHAN Thangjam Robindro Singh	Forklift Op. General Manager	Production 55	M 07.03.2024 M 07.03.2024	168 86 170 83	NIL Hypertension Since 25 Years Anti Hypertensive		8/80 79 6/80 79	6 \ 6 \ 6 \ 6 \ 18 \ 6 \ 18	N \6 N \ N \36 N \	6 NA 36 6\6	NA NA 6 \ 6 N \ 6	NA No N \ 6 No	15.6 13.6	9010 6390	207000 85.6 25.6 197000 89.6 56.2	0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
53 54		MANAS PRADHAN Mitesh Maheshbhai Parmar	Forklift Op. Helper		M 07.03.2024 M 07.03.2024		NIE NIE NIE NIE NIE NIE	NIL NIL 12 NIL NIL 12	0/80 79 4/80 79	6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA NA NA	NA No NA No	16.4 13.1	6030 8980	151000 95.6 26.3 187000 89.6 24.1	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
55 56	920066 23477 22470	Dipraj Kiransinh Parmar PARMAR HARSHADKUMAR ALOK PRADHAN	Helper Helper Forklift Op.	32	M 07.03.2024 M 07.03.2024	159 60	NIL NIL NIL NIL NIL NIL		0/70 73 0/80 79 4/80 79	6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No	14.5 14.5	9020 6450	263000 95.6 26.3 170000 99.6 29.5 210000 116.6 28.6	0.96	Nil Nil Occasional/hg Nil Nil Occasional/hg Nil Nil Occasional/hg Nil Nil Occasional/hg	Absent Occational/hp	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
58 59	23418 23433	SANTOSH PARDHAN DABHI KARANSINH	Forklift Op. Helper	24	M 07.03.2024 M 07.03.2024 M 07.03.2024	163 71	NIL NIL NIL NIL	NIL NIL 1	9/80 79 0/80 79 0/70 66	6 \ 6 \ 6 \ 6 \ 6	N \6 N \	6 NA 6 NA	NA NA	NA No NA No	15.7 13.6	8370 8400	285000 123.3 22 240000 116.6 26.3	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
60	920042	Rahulkumar Rajendrasinh Solanki Sanjaybhai Jagadishbhai Bhaliya	Helper Welder	Mech.Maint 26	M 07.03.2024	167 55	NIL NIL NIL	NIL NIL 1	6/80 77 6/80 73	6\6 6\6 6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA NA NA	NA No NA No	12.3 14.4	6120 6330	242000 95.6 21.3 242000 89.6 28.5	0.96 0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
61 62 63	910002 910003	Jigar Amrutlal Shihora Tanmay Dipakbhai Patel	Assistant Manager Assistant Manager	Electrical Maintenance 28	M 07.03.2024 M 07.03.2024 M 07.03.2024	174 86	NIL NIL NIL NIL	NIL NIL 1	4/80 79 6/80 78	6 \ 12 6 \ 12 6 \ 6 6 6 6	N \6 N \ N \6 N \	6 6\6 6 NA	6 \ 6 N \ 6 NA NA	N \ 6 No NA No	14.5 15	6460 9110	243000 95.6 30.5 197000 89.6 25.1	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
64 65		Ravi Kumar Ramkhelavan Saket SUSHIL PRADHAN Patel Bhavik Kumar	Helper Forklift Op.	22	M 07.03.2024 M 07.03.2024	166 57	NIE NIE NIE NIE NIE	NIL NIL 1	0/70 71 6/70 74	6 \ 18 6 \ 18 6 \ 6 6 \ 6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No NA No	13 15.9	4650 7060	198000 99.6 25.8 187000 95.6 26.1	0.85	Nil Nil Occasional/hp Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
66	910094	Patel Bhavik Kumar Rahul Shrimali BARIYA JAYESHKUMAR	Assistant Engineer Junior Engineer	Mechanical Maintenance 31	M 07.03.2024 M 07.03.2024	170 82	NIL NIL NIL		6/80 79	6 \ 6 \ 6 \ 6 \ 6	N \6 N \	6 NA	NA NA	NA No	15.2	8170 10150	229000 99.6 18.6 282000 89.6 26.1	1.02	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
68 69	23489	PARMAR ATULKUMAR SUJIT KUMAR PANDEY	Helper Helper Forklift Op.	26	M 07.03.2024 M 07.03.2024 M 07.03.2024	159 51	NIL NIL NIL	NIL         NIL         1:           NIL         NIL         1:           NIL         TOBACCO CHEWING         1:		6\6 6\6	N \6 N \	6 NA	NA NA	NA No	14.6	8830 8730	427000 95.6 32 198000 92.3 35	0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
70 71 72	23402	KARTIK JENA Milankumar Arvindbhai Bhaliya	Supervisor Helper	28	M 07.03.2024 M 07.03.2024 M 07.03.2024	169 69	NIL NIL NIL NIL NIL NIL	NIL TOBACCO CHEWING 1:	2/80 76 2/70 73 2/80 76	6\6 6\6 6\6 6\6	N \6 N \	6 NA 6 NA	NA NA	NA No NA No	12.4 14.3	6990 7440	190000 93.6 25.8 269000 116.6 15.6	0.79	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
73 74	23401	JAYSWAL PIYUSHKUMAR Omkar Suhas Mandlik Senthil Kumar	Supervisor Assistant Manager		M 07.03.2024 M 07.03.2024		NIL NIL NIL NIL	NIL NIL 13 NIL NIL 13	0/70 73 6/80 78	6 \ 6 \ 6 \ 6 \ 6 \ 6 \ 24 \ 6 \ 24	N \6 N \ N \18 N \	6 NA 18 6\6	NA NA 6 \ 6 N \ 6	NA No N \ 6 No	13.4 14.4	6220 6820	236000 125.5 33.4 249000 119.8 26.8	1.02 0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
75 76	23490	SHADAB ALAM	Assistant Manager Forklift Op.	24	M 07.03.2024		NIL NIL NIL NIL	NIL NIL 1	2/70 73 0/70 73	6 \ 6 \ 6 \ 6 \ 6	N \6 N \	6 NA NA	NA NA	NA No NA No	14.8 14.7	8130 6880	243000 119.8 28 208000 114.5 26.1	0.96 0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
77 78	920129	Haresh Manilal Rohit Rajendrabhai Bhikhabhai Makwana	Helper Fitter	Mech.Maint 46	M 07.03.2024 M 07.03.2024	175 61	NIL NIE NIE NIE NIE NIE	NIL NIL 1	0/82 79 0/80 79	6 \ 6 \ 6 \ 6 \ 6	N \6 N \ N \18 N \	6 NA 18 NA	NA NA	NA No NA No	14.6 14	5800 9370	174000 126.6 28.7 269000 123.9 29.6	1.02	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Mild High Freq Hearing Lo	Normal Hearing  oss Mild High Freq Hearing Loss
79 80	910109	Rajesh Rajbhan Charmkar Shubh Patel	Helper Junior Engineer	Production 22	M 07.03.2024 M 07.03.2024 M 07.03.2024	165 47 171 49	NIL NIL NIL NIL NIL NIL	NIL NIL 13	8/70 73 8/80 77	6 \ 6 \ 6 \ 6 \ 6	N \6 N \	6 NA	NA NA	NA No	14.2	7800 6960	204000 95.6 15.2 173000 86.6 28.6	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
82 83		Dhrumanrajsinh Jadeja Ankurkumar Haribhai Patel A BARIA VIPINKUMAR	Senior Engineer Assistant General Manager Helper	Mechanical Maintenance 26 Electrical Maintenance 37		173 73 169 88 171 72	NIL NIL NIL		8/80 75 0/84 81	6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA NA NA	NA No NA No	13.8 13.4	7840 10450	263000 84.8 28.9 238000 88.8 26.3	1.02	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
84 85		MUNIYA SACHINKUMAR Jitendrakumar Chimanbhai Vasava	Helper Helper	21	M 07.03.2024		NIL NIL NIL NIL NIL NIL	NIL NIL 1	4/80 73 0/70 73	6\6 6\6 6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA NA NA	NA No NA No	13.5 12.3	8700 4780	174000 89.6 25.1 214000 99.8 28.7	0.88	Nil Nil 1-3/hpf Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
86 87	910048 920001	Pandya Divyang Kumar Jaydipkumar Arjunbhai Parmar	Deputy Engineer RBD Operator	RBD 27	M 07.03.2024 M 07.03.2024	178 63 169 80	NIL NIL NIL NIL NIL	NIL NIL 1	4/70 71 6/80 78	6\6 6\6 6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No	14.3 13.8	6080 7450	360000 86.6 28.9 268000 95.6 26.3	0.96 0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
88 89	910044 23494	Rajesh Bathre RATHAVA MANJIBHAI	Senior Engineer Forklift Op.	Production 34 24	M 07.03.2024 M 07.03.2024	160 73 159 44	NIL NIL NIL NIL	NIL NIL 1	0/80 79 6/80 73	6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No NA No	13.7 12.9	8250 5400	190000 99.6 36 211000 89.6 25.1	0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
90 91	910037	Pragati Tripathi A. Velraj Viral Dilimbaj Phalina	Assistant Manager Assistant Manager Helper		F 07.03.2024 M 07.03.2024 M 07.03.2024	157 61 180 78	MIL   NIL   NIL		0/70 68 6/80 79	6\60 6\60 6\6 6\6	N \18 N \ N \6 N \	18 6 \ 6 6 NA	NA NA	NA NO	12.2 14.8	5860 7460 6020	281000 95.6 25.3 221000 86.6 26.9 290000 86.6 27.1	0.96 0.87	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
92 93 94	920011	Viral Dilipbhai Bhaliya Sunilkumar Ramanbhai Baria Vijaykumar Budhabhai Solanki	Helper RBD Operator	Production 28	M 07.03.2024 M 07.03.2024 M 07.03.2024		NIL	NIL         TOBACCO CHEWING         12           NIL         NIL         12           NIL         TOBACCO CHEWING         12	2/80 74	6\6 6\6	N \6 N \	6 NA 6 NA	NA NA	NA No NA No	13.6	7930 8950	220000 84.5 25.6 301000 85.5 26.3	0.85	Nii Nii Occasiona/np Nii Nii Occasiona/hp Nii Nii Occasiona/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
95 96	23438 23446	RATHAVA NITINKUMAR THAKOR RANVATSINH	Helper Helper	25 29	M 07.03.2024 M 07.03.2024	159 53 162 65			0/70 73 4/80 74	6\6 6\6	N \6 N \	6 NA 6 NA	NA NA NA	NA No NA No	11 14.2	7450 11410	286000 82.5 25.4 187000 85.6 32	0.87	Nil Nil Occasional/hp Nil Nil 3 - 5/hpf	Absent Occational/hp Absent 2 - 4/hpf	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
97 98	920019 920125	Hiteshkumar Darshanbhai Rathava Kiranbhai Gannathhai Parmar	Helper Helper	Production 26 RBD 23	M 07.03.2024 M 07.03.2024	149 46 161 66	NIL NIL NIL NIL NIL NIL	NIL TOBACCO CHEWING 1:	6/80 73 6/80 73	6\6 6\6 6\6 6\6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No	11.2 15.8	7040 6390	291000 89.6 25.6 320000 99.6 22	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp		Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
99 100	910068	Sagarkumar Vijaysinh Chavda Yogesh Nagnath Kumbhar	Helper Assistant Manager	RBD 26 Production 31	M 07.03.2024 M 07.03.2024	168 46 172 82	NIL NIL NIL NIL		4/80 78	6 \ 6 \ 6 \ 6 \ 6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA	NA No NA No	14.4	10110 6470	229000 95.6 36.3 260000 92.6 32	0.99	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
101 102	910112 911018	Pruthviraj Solanki Bhaveshbhai Ganpatbhai Parmar KHANT RAJESHBHAI	Assistant Engineer Helper Supervisor	Production 26	M 07.03.2024 M 07.03.2024	178 98	NIL	NIL NIL 1	2/80 75 2/80 74	6 \ 6 \ 6 \ 6 \ 6	N \6 N \	6 NA	NA NA	NA NO	15.7 12.3	9290 10240 9130	198000 96.6 25.9 366000 93.6 26.3	0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
103 104 105	23456 910114 23436	Nishil Singh JADAY NILESHKUMAR	Junior Engineer Helper	Production 25	M 07.03.2024 M 07.03.2024 M 07.03.2024	172 80	NIL NIL NIL	NIL NIL 1	8/80 74	6\6 6\6 6\6 6\6	N\6 N\ N\6 N\	6 NA 6 NA	NA NA	NA No	14.4	7650 8590	271000 99.6 25.6 242000 89.6 22.1	0.95 0.87	Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hp Nil Nil Occasional/hc			Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
106	920007	Jigneshkumar Vitthalbhai Parmar Dhruv Patni	RBD Operator Junior Engineer	RBD 27 Mechanical Maintenance 26	M 07.03.2024 M 07.03.2024	162 61 171 88	NIL NIL NIL NIL	NIL NIL 1	0/80 79 4/80 79	6\6   6\6	N \6 N \	6 NA	NA NA NA NA	NA No	13.2 15.1	7700 11130	231000 85.5 30 290000 84.5 25.6	0.9 0.96	Nil Nil Occasional/hp Nil Nil 1 - 3/hpf	Absent Occational/hp Absent 3 - 5/hpf	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
108	910125 920128	Dhruv Patni Kiran Bhaliya Gaurang Kanubhai Solanki	Junior Engineer Helper	Mechanical Maintenance 26 RBD 19	M 07.03.2024 M 07.03.2024	162 76 167 69	NIL NIL NIL NIL	NIL NIL 13 NIL NIL 13	6/80 73 0/82 79	6 \ 9 6 \ 9 6 \ 6 6 \ 6	N \6 N \ N \6 N \	6 NA 6 NA	NA NA NA NA	NA No	14.7 13.2	9470 10370	231000         85.5         30           290000         84.5         25.6           282000         86.6         28.3           771000         86.6         25.9           452000         96.6         25.9           280000         89.6         23           225000         116.6         27	0.85 0.66 0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
110	920133 920009	Dhavalkumar Sureshbhai Parmar Vijaysinh Badarsinh Zala	Helper RBD Operator	RBD 20 RBD 31	M 07.03.2024 M 07.03.2024	154 42 170 84	NIL NIL NIL NIL NIL	NIL TOBACCO CHEWING 12	0/70 71 2/80 78	6 \ 6 \ 6 \ 6 \ 6	N \6 N \	6 NA NA	NA NA NA	NA No	11.2	12500 7470	452000 95.6 25.9 280000 89.6 23	0.87	Nil Nil 2 - 4/hpf Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
113	910107	Ganpatbhai Jayanibhai Solanki Deep Patel	Helper Junior Engineer	Production 24	M 07.03.2024 M 07.03.2024 M 07.03.2024	172 55	NIL NIL NIL	NIL TOBACCO CHEWING 12 NIL NIL 11	0/70 73	6\6 6\6	N \6 N \ N \6 N \	6 NA	NA NA NA	NA No NA No	14	10250 7380 6910	238UUU 125.5 3b	0.85	Nil Nil Occasional/hp Nil Occasional/hp	Absent Occational/hp	Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing
115 116	910102	Jignesh Vitthalbhai Prajapati Shrawan Suthar Nileshkumar Ariunsinh Parmar		Ele.Maint 39 Electrical Maintenance 28 Production 23	M 07.03.2024 M 07.03.2024 M 07.03.2024	173 60 162 4°	NIL NIL NIL NIL NIL NIL NIL NIL NIL	NIL NIL 1  NIL NIL 1  NII NII 11	0/80 78	6\6 6\6	N\8 N\ N\6 N\	8 NA 6 NA	NA NA NA NA NA NA	NA No	14 14.5 13.9	6910 8630 5840	272000 114.5 48.9 219000 116.6 25.4 188000 98.9 23.6	0.96 0.88 0.74	Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
118	920006	Nileshkumar Arjunsinh Parmar Sateesh Kumar Tiwari Gulabsinh Takhatsinh Parmar	Helper Senior Engineer Helper	Production 35 RBD 33	M 07.03.2024 M 07.03.2024 M 07.03.2024	178 75 175 65	NIL NIL NIL NIL NIL NIL	NIL         NIL         13           NIL         NIL         12           NIL         NIL         13           NIL         NIL         12	4/80 73 0/80 79	6 / 6 6 / 6	N \6 N \	6 NA 6 NA	NA NA	NA No NA No NA Yes (Partial)		5840 6620 6790	188000 98.9 23.6 155000 89.6 25.6 170000 85.6 55	0.85	Nil         Nil         Occasional/hg           Nil         Nil         Occasional/hg           Nil         Nil         Occasional/hg	Absent Occational/hp Absent Occational/hp Absent Occational/hp	Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
119 120	920089 920067	Maheshbhai Ramubhai Bariya Mahendrasinh Natvarsinh Chauhan	Helper Helper Helper	Production 32	M 07.03.2024 M 07.03.2024 M 07.03.2024	159 47	NIL NIL NIL	NIL NIL 1	0/70 73	6 \ 6 \ 6 \ 6	N \6 N \	6 NA	NA NA	NA Yes (Partial) NA No NA No		6790 8780 6620	267000 86.6 45.6	0.85		Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
121 122	911081 920046	Maheshbhai Ramubhai Bariya Mahendrasinh Natvarsinh Chauhan Bipin Malabhai Bhuriya Vipulikumar Arvindibhai Varia BARIA RANJITBHAI	Welder Helper	Mech.Maint 50	M 07.03.2024 M 07.03.2024 M 07.03.2024	173 64	NIL NIL NIL	NIL NIL 13	6/80 79 0/80 78	6 \ 12 6 \ 12 6 \ 6 6 6 \ 6	N \36 N \ N \6 N \	36 6\6 6 NA	6 \ 6 N \ 6 NA NA	N \ 6 No NA No	12.9 12	6620 4560 8070	189000 116.6 45.2 207000 126.6 25	0.96	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing Normal Hearing
124	911083	Rushi Jaydipsinh Chauhan	Helper Helper	Production 27	M 07.03.2024	163 69	NIL NIL NIL	NIL NIL 10	0/70 68 4/80 79	6 \ 6 \ 6 \ 6 \ 6	N \6 N \	6 NA 6 NA	NA NA	NA No NA Yes (Partial)	11.6	10090 6180	381000 115.5 26.3 212000 84.5 21	0.85	Nil Nil Occasional/hp Nil Nil Occasional/hp	Absent Occational/hp	Normal Spirometry	Normal Hearing Normal Hearing	Normal Hearing
125 126	910120 911011	Jaydipkumar Thakorbhai Bhaliya Krunal Varia Mukeshbhai Navalsinh Baria	Helper Junior Officer Helper	Production         20           Production         28           Production         27	M 07.03.2024 M 07.03.2024 M 07.03.2024	163 77	NIL	NIE         NIE         13           NIL         NIE         12           NIL         NIE         13	6/80 79 6/80 79	6\6 6\6	N \6 N \	6 NA	NA NA	NA No NA No NA No	13.5 13.5	7100 8600	292000         89.6         15.2           251000         99.6         25           307000         85.6         26	0.96 0.90	Nil Nil Occasional/hg Nil Nil Occasional/hg Nil Nil Occasional/hg	Absent Occational/hp Absent Occational/hp Absent Occational/hp	Normal Spirometry Normal Spirometry Normal Spirometry	Normal Hearing Normal Hearing Normal Hearing	Normal Hearing Normal Hearing Normal Hearing
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#### Bajaj Allianz General Insurance Company Ltd. Bajaj Allianz House, Airport Road, Yerawada, Pune - 411006 PUBLIC LIABILITY (ACT) POLICY POLICY SCHEDULE

#### UIN: IRDAN113RP0023V01200102

Policy issuing office and Correspondence address for communication by policyholder for claim, service request, notice, summons, etc. :

Baiai Allianz General Insurance Co Ltd. 952/954 Appasaheb Marathe Marg,, Next to Saraswat Bhavan,, Prabhadevi , Mumbai, MUMBAI-400025 Phone No :02266628666

369128814/2

OG-24-1919-3304-00000067 Policy No.

Product PUBLIC LIABILITY (ACT) POLICY

**Period of Insurance** From 00:01:00 05-DEC-23 To 04-DEC-24 29-DEC-23 Policy Issued On

Midniaht

Co-Insurance Details Own Share: 100%

HINDALCO INDUSTRIES LTD Insured Name

Insured Address AHURA CENTRE, B WING, MAHAKALI CAVES ROAD, ANDHERI..., PO Area - ANDHERI EAST...

MUMBAI, MAHARASHTRA - 400093

Bank Details: No Details No Details

**GSTIN / UIN** 27AAACH1201R1ZN Place of Supply/State 27 - Maharashtra

Code/Name Invoice No:

Company GST No: 27AABCB5730G1ZX

Company PAN : AABCB5730G

Sum Insured (Rs) Description Aggregate limit of Indemnity during the policy period 15.00.00.000.00

Additional\*\* Loading @ 0 % Additional Discount@ 0 % **Base Premium** 88.340.00 Special Discount **Net Premium** 88,340.00 Terrorism\*\* Surcharge 0.0 **Environment Fund** 88,340.00

Stamp Duty

State GST (9%) 7.951.00 Central GST (9%) 7,951.00 **Final Premium** 1.92.582.00

\*\*\* All Premium figures are in Rupee.

On specific request and subject to terms and conditions, record of information exchange will be made available.

As per the GST regulations, the amount of GST will not be refunded if the policy / endorsement is cancelled after 30th September of the next financial year.

I/We hereby declare that though our aggregate turnover in any preceding financial year from 2017-18 onwards is more than the aggregate turnover notified under sub-rule (4) of rule 48, we are not required to prepare an invoice in terms of the provisions of the said sub-rule.

Scope of Cover Risk Covered Special Perils

Public Liability Act Insurance. As per policy wordings attached.

As per the policy wording attached

As per policy wordings attached. Special Exclusions Subject to Clauses As per policy wordings attached.

Warranties

Limit of Indemnity: INR 50,000,000 per claim and INR 150,000,000 in aggregate; Insureds Premises: All premises within India Owned, Operated, Rented, Leased by the Insured for the business purposes; Risk Location of the Factory Address: BIRLA COPPER ASOJ PRIVATE LIMITED, SURVEY NO. 21, VIL-LAGE - ASOJ, VADODARA - HALOL HIGHWAY, TQ - WAGHODIA, DIST - VADODARA, GUJARAT -391 510

Special Conditions

Estimated Annual Turnover - INR 7,68,78,00,00,000/-; Paid Up Capital: INR 2,24,71,72,523; Territory and Jurisdiction: India.; Insureds Business: Manufacturing, distribution, supply, sale & marketing of, & trade in; alumina, primary aluminium & downstream value added products through rolling extrusion and recycling; Power generation, Bauxite & coal mining, and related products & services. Manufacturing, distribution, supply, sale & marketing of, & trade in; Copper cathodes and continuous cast copper rods, precious metals, sulphuric acid, phosphoric acid, di-ammonium phospate (DAP) & other phosphoric fertilizers, and phospho gypsum; and related products & services. Loading, Un-loading & Handling of Captive Cargo (Copper Unit) and Commercial Cargo at Dahej Harbour. Subsidiary Company Name: 1) Minerals and Minerals Limited: 2) Suvas Holdings Limited: 3) Utkal Alumina International Limited: 4) Hindalco-Almex Aerospace Limited; 5) Dahej Harbour and Infrastructure Limited; 6) Tubed Coal Mines Limited; Business Description entity wise: Name of the Entity: Minerals & Minerals Limited; Business Description: Manufacture of non-metallic mineral products n.e.c; Name of the Entity: Suvas Holdings limited; Business Description: Power Generating Company; Name of the Entity: Utkal Alumina International Limited; Busi-

Fax no: 020-30512246



ness Description: Alumina Refining; Name of the Entity: Hindalco-Almex Aerospace Limited; Business Description: Manufacture of basic precious and non-ferrous metals; Name of the Entity: Dahej Harbour and Infrastructure Limited; Business Description: Building of complete constructions or parts thereof; civil engineering; Name of the Entity: Tubed Coal Mines Limited; Business Description: Mining and agglomeration of hard coal Includes underground or open-cut mining of anthracite, bituminous or other hard coal; cleaning, sizing, pulverizing and other operations to improve the quality; operations to recover hard coal from culm banks; manufacture of briquettes or other solid fuels consisting chiefly of hard coal and in-situ gasification of coal. Hindalco Industries Ltd., Kuppam works, SY 255 279 257 Industrial Park C Block Kuppam, Chittor 517425, Andhra Pradesh Business of the Insured:- Aluminium extrusion plant-Aluminium solutions for Heat Exchangers, Automotive applications and HVACR Turnover:- INR 360 Crores;

Comments Rest as per Policy wording.

Bank RM Employee Code: Y
Business Occupancy: Others
Business Description: -

Broker Code 10003766 Channel Name : BR

Broker Name: Aditya Birla Insurance Brokers Ltd

Contact No: 8939928889/18002095858

#### Email - k.panneer@adityabirlacapital.com

Premium Collection Details [Receipt No/Collection No/Amount] 1919-00119904 / 385905610 / Rs. 1,92,581.00 ,

\*\*\* If Premium paid through Cheque, the Policy is void ab-initio in case of dishonour of Cheque

\*\*\* This policy is subject to the standard policy wordings, warranties and conditions applicable for this product in addition to any specific warranty or condition attached

For & On Behalf of Bajaj Allianz General Insurance Company Ltd.

Stamp Duty Rs.0.25

Authorized Signatory
Printed , Signed and Executed at Pune

This document is digitally signed, hence counter signature / stamp is not required

Regd Office: Bajaj Allianz House, Airport Road, Yerwada Pune-411006 (India), A Company incorporated under Indian Companies Act, 1956 and licensed by Insurance Regulatory and Development Authority of India [IRDA] vide Reg No.113, Corporate Identification Number U66010PN2000PLC015329.

Consolidated Stamp Duty of Rs.0.25/- paid towards Insurance Stamps vide Challan No. MH009975032202324M Defaced No. 0005568654202324 ORDER NO.CSD/17/2023/4571 ORDER DATED 10.11.2023 DEFACED dated 10-NOV-23 timing 16;41:13 of General Stamp Office, Mumbai, India.

Principal Location: Bajaj Allianz House, Airport Road, Yerwada, Pune - 411006 PH:66026666 | Services Accounting Code: 997139 - Other non-life insurance services (excluding reinsurance services). No reverse charge is payable on these services.

In case of any claim, please contact our 24 Hour Call centre at 1800-102-5858 (Toll Free) / 91-020-30305858 (chargeable, add area code before this number in case of mobile call) or email us at 'Bagichelp@bajajallianz.co.in'.

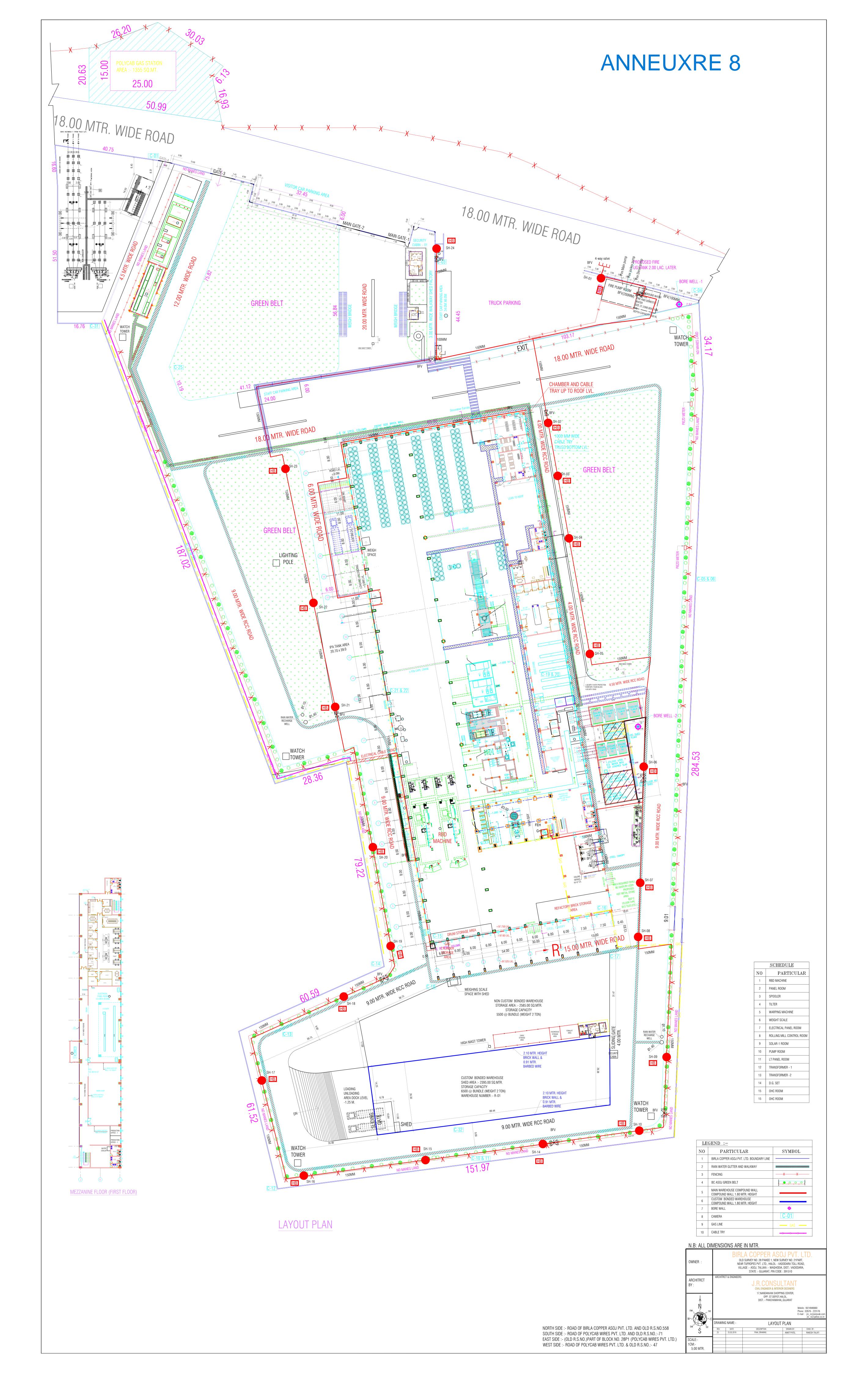
385905610/-/10003766/-/-

Prefix your area code if you are calling from a Mobile Device.

A Company incorporated under Indian Companies Act, 1956 and licensed by Insurance Regulatory and Development Authority of India [IRDA] vide Reg No.113, Corporate Identification Number U66010PN2000PLC015329.

Quotation No: QU-24-1919-3304-00000079

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# SAFETY AUDIT REPORT

(As per IS 14489 and Gujarat Factory Rules)



# Birla Copper Asoj Pvt Ltd. Copper Rod Plant

Old R S No-28P1, New R S No-21P, Old R S No-40 & New R S No-27, Near Tufropse Pvt Ltd., Halol-Vadodara Toll Road, Taluka-Waghodia, Dist:Vadodara

## September-2022





Competent Persons | Chartered Engineers | Govt. Regd. & Approved Valuers Technical & Safety Trainers | Technical Consultants | Inspection Engineers

SF-1, 2 & 21, Shree Siddheshwar Hub, Khodiyarnagar Road, New VIP Road, Vadodara-19, Gujarat, India.

(M) +91 9825605055 (O) +91 9099013604

E-mail: dmvaidvaassociates@gmail.com • Web: www.dmva.in

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#### **AUDITOR'S REPORT**

The safety audit of Birla Copper Asoj Pvt Ltd, (earlier known as Ryker Base Pvt Ltd) At Old R S No-28P1, New R S No-21P, Old R S No-40 & New R S No-27, Near Tufropse Pvt Ltd., Halol-Vadodara Toll Road, Taluka-Waghodia, Dist:Vadodara was carried out during September 2022 by D. M. Vaidya & Associates, Vadodara. During the period of audit, field visits and technical discussions were held by the auditor. Auditor Mr.M.M.Patki reviewed the documents and discussed with concern officer of the plant. Safety Audit is carried out as per IS: 14489 2018. The auditor has sincerely tried to adhere to the terminology and methodology of IS: 14489. The observations and recommendations are based on information & documents provided to us by the company and plant visits. Auditors acknowledges the management of Birla Copper Asoj Pvt Ltd for their valuable co-operation & help render for the audit

# Section 1 Introduction

#### 1.1.0. INTRODUCTION:

#### **INTRODUCTION OF SAFETY AUDIT:**

It is one of the tools by which information can be gathered in order to review the documents, compliance of procedures, statutes etc. It facilitates to strengthen the organizational set up for Health, Safety & Environment and bring out awareness thru various Training Program etc in line with the commitments made in the EHS Policy by the Occupier & bridge the gap between systems and procedures by Middle management for implementation that carries out the work in the Organization. It is an approach towards Total Loss Control & its focus point is an important tool for identifying the areas of risk or vulnerability hazards and potential dangers in proposed, existing and construction activities as against the standards of EHS which is required to be maintained in processes, selection of facilities & equipments.

It also helps in arriving at the conclusion & making appropriate recommendations with assigning responsibilities for the actions required to remove or to reduce hazard potentials before personal &/or property damage occur and helps build the confidence in employees.

#### **WHY SAFETY AUDIT?**

Though the potential loss in the subject factory is very negligible than the loss potential in a chemical/petrochemicals/gas industry, the incidents like personal injuries, fires due to IPA & its spillage, NG could occur & result in a damage. For example, a small fire from IPA can lead to a major shut-down or break-down of the plant, resulting in heavy financial loss. Loss potential is not only confined to activities concerned with the production but it also, focuses on social obligations & responsibilities by the company.

Hence, Safety Audit and Inspections are necessary for all types of industries & industrial activities as well. During audit, each stage and activity is examined in the Health and Safety Management system by gauging compliance & controls, the organization has developed. The ultimate aim is assessing their effectiveness and validity for the future.

The Health and Safety performance of the Organization depends on Management's approach to observe strict compliance of procedures & practices. The Health and Safety must, therefore, be efficiently & effectively managed to sustain with excellent overall performance of manufacturing unit.

The Assignment of Periodic Safety Audit of **Birla Copper Asoj Pvt Ltd** was awarded to **D. M. Vaidya & Associates, Vadodara** and was carried out on 16<sup>th</sup> September 2022. The overall approach included staff interview, discussion with various level of employees, plant visit / inspection & documents verification.

The basic aim of the Periodic Safety Audit was to review the general safety performance of the facility after safety audit in 2020 and to identify significant non-compliance or good practices, issues that were not being adequately addressed and may be a potential cause for concern in either the short or the long term.

It is expected that by taking appropriate actions and implementing the suggestions, there will be an overall improvement in safety to personnel and the property, both within and outside the factory.

#### 1.2.0. METHODOLOGY:

The following methodology was adopted for reviewing the plant operating and maintenance procedures / practices, safety system and other safety matters to make the safety more effective.

#### 1.2.1. OBTAIN TECHNICAL INFORMATION ABOUT VARIOUS PLANTS:

The concern plant managers / engineers and operation personnel had provided useful technical input as a part of the safety audit activity.

### 1.2.2. <u>DISCUSSION WITH PLANT MANAGEMENT PERSONNEL ON FOLLOWING SAFETY</u> RELATED MATTER / ASPECT:

- a. Organization and its approach to safety as a whole. Company's EHS policy and attitude.
- b. Operating and maintenance system / procedure.
- c. Safety features and procedures.
- d. Plant upkeep and Housekeeping.

- e. Firefighting facilities and system.
- f. Personal protective equipments availability, use etc.
- g. Accident reporting system review.
- h. Plant equipments and employees Health Monitoring.
- i. Modification and maintenance practices.
- Compliance of various statutory requirements with respect to Health and safety of man and machine.

#### 1.2.3. VISIT TO VARIOUS SECTIONS OF THE FACTORY.

The purpose of the visit to various sections of the factory including storage area is to find out any apparent hazards in the plants. Detailed observations made with respect to piping and equipments overall condition and its support Housekeeping, Machine guards, Safety Display, Personal protective equipments, Hazardous gases leak monitoring practices environmental protection measures etc.

During the visit, discussion was held with operating and maintenance personnel to assess their understanding of process and maintenance hazard.

### 1.2.4. <u>ADMINISTER A QUESTIONNAIRE AND NOTED THE EXISTING STATUS AND GIVEN THE SUGGESTIONS.</u>

A detailed questionnaire was made on various topics and the existing safety systems / procedures / practices were studied and wherever required; the suggestions were also given.

## 1.3. The following elements of management system and technical aspects were audited as per IS 14489 2018:

1	OH & S policy					
2	Safety organization chart					
3	Training records on safety fire and first-aid					
4	Record of plant safety inspections					
5	Accident investigation reports					
6	Accidents, dangerous occurrences and near miss incidents - statistics and analysis					
7	Record of tests and examinations of equipment and structures as per statutes					
8	Standard Operating Procedures (SOP) for various operations					
9	Record of work permits;					
10	Record monitoring (flammable, substances)					
11	Maintenance, testing and calibration records of fire detection and firefighting equipment					
12	Medical records of employees					
13	Records of industrial hygiene surveys (noise, ventilation, illumination, dust etc.)					
14	Material Safety Data sheets					
15	On-site emergency Mock Drills					
16	Records of storage of hazardous solid waste and its disposal					
17	Records of gaseous emissions and effluent discharges to the environment					
18	Housekeeping inspection records					
19	Minutes of safety committee meetings					
20	Statutory licenses and approvals					
21	Records of any modifications carried out in plant or process					
22	Maintenance procedure and records					
23	Instrumentation and equipment calibration and testing records					
24	Planned shutdown maintenance procedures					
25	In service inspection manuals, records including that of material handling					
26	OH & S budget					
27	Inspection books and other statutory records;					
28	Records of previous audits and safety analysis;					

29	Procedures for safe transportation of hazardous substances;					
30	Calibration records;					
31	Records for breakdown of plants during the process of manufacture;					
32	Records for waste material generated and their disposal;					
33	SOP for disposal of waste materials and					
34	Records for issue of PPE items to the personnel working in process building.					

#### **STANDARDS:**

The audit was conducted with the following standards and codes of practices on safety and occupational health:

- Indian Standard on Codes of practices for Occupational Safety & Health Auditing (BIS 14489: 2018)
- **ii)** Statutory requirements (Factories Act, Explosive Act, other related Acts & Rules made there under.
- **iii)** Codes of practices prepared by National and international Organizations (E.g. BIS, ICMA, NSC, LPA, etc.)
- iv) Current Safe Practices, Prevalent in the factory.

#### Section 2 The Company





#### **Company Introduction**

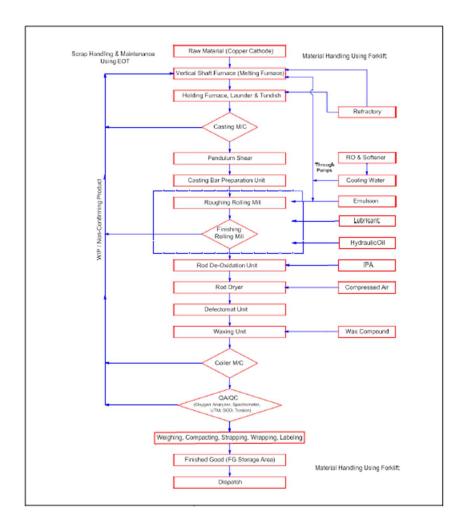
- Birla Copper Asoj Pvt Ltd (formally known as Ryker Base Private Ltd ) was incorporated in year 2016 to develop, own and operate Copper Wire Rods, ABC Copper Conductors manufacturing operations ( Joint venture of M/s Polycab India Ltd & M/s Trafigura )
- The plant has state of art Contirod CR 3500 technology supplied by SMS GmbH, Germany for design, engineering, supply and supervision of commissioning of plant and equipment's.
- The plant is suitable to manufacture ETP Grade Continuous Cast Copper Rods confirming to ASTM B49:20 and BS EN: 1977 standards with product range between 8.00 to 26.00 MM diameter size & Annealed Bare Copper (ABC) wire range between 1.35 mm to 4.50 mm diameter sizes wire.
- BCA plant is commissioned in the month of 13<sup>th</sup> January'2019 and the company has commenced its commercial production in the month of April 2019.
- BCA (formally known as RBPL) was 100% subsidiary of M/s Polycab India Limited, from 6<sup>th</sup>
   May'2020 to 2<sup>nd</sup> November'2021.
- On 3rd November'2021, an acquisition has been through Hindalco's wholly owned subsidiary
   M/s Renuka Investments & Finance Ltd.
- Name of the company has been changed from "Ryker Base Private Limited" to "Birla
   Copper Asoj Private Limited "w.e.f. 11 than January 2022.

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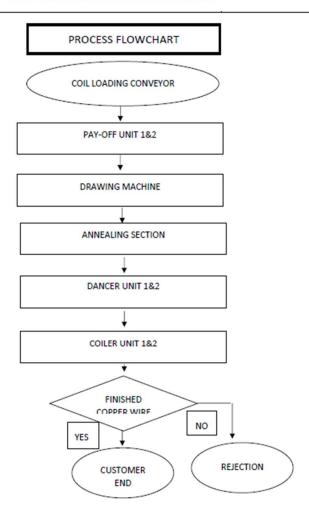
Production: Manufacturing of copper rods -19000 MT/Month & ABC Wires -5000 MT/month

#### **Process chart:**

### BIRLA COPPER ASOJ PVT LTD CCR PROCESS FLOWCHART



### BIRLA COPPER ASOJ PVT LTD ABC WIRE PROCESS FLOWCHART



#### **Key Departments**

- Furnace area
- Utility Area
- IPA storage area
- Casting area

#### **Sources of Hazards**

#### ❖ <u>Fire</u>

- NG usage area
- Sub station
- -IPA storage and usage area

#### ❖ Noise

-furnace area

#### **Unsafe acts and conditions**

#### ❖ <u>Toxic</u>

-Nil

#### Other work specific hazards in processes

Collection and Transportation of material	1) Injury due to falls of plates While transportation from one place to another location.
	2) Back pain while bending for lifting the material.
	3) Tripping due to unorganized storage of material.
	4) Back sprain due to use of faulty pallet cart.
Oil filling in machine	1) Injury of leg due to slip on spilled oil on floor.
Machine cleaning	1.) Coolant may enter into eyes while cleaning the machine with coolant.
Use of electricity	1) Possibility of electric shock due to loose & open wire connection.
Logistic	1) any body part can injury while load & unload
Crane Operation	1)Material fall hazard
	2)Component fall hazard

#### ❖ Other Hazards

Sr No.	Name of the Hazards	Its Sources & Reasons	
1	Structural Failure	Within the factory	
2	Natural calamity-Earth Quake, flood, Cyclone	Outside the factory	
3	Electrical Shock	Electrical Panels and Earthing leakage	
4	Food Poisoning & Other Medical emergencies	In Canteen due to contamination of Food	
5	Snake Bite	In Open areas	
6	Explosion of pressure vessels	Pressurization of pressure vessels	

# Section 3 Executive Summary

The safety Audit for Birla Copper Asoj copper plant is carried out by D. M. Vaidya & Associates. on 16<sup>th</sup> Sept 2022.

**Birla Copper Asoj plant at Halol site** is group company of Aditya Birla and one of the independent plant involved in copper rods and wires production having capacity of 24000 MTPM.

**Birla Group** is pioneers in promoting industrialization in the country having historical back ground of being one among the best managed business enterprises possessing excellent work ethics, Human Resources Developmental capability, Sustainable growth and above all an enviable philosophical approach aimed towards overall social, cultural & economic growth of India.

The unit is headed by Unit Head (President) who is overall in-charge of all the functions in the unit However Safety, Health; Environment is handled by Sr Executive, EHS.

#### **System Ability:**

- All areas & buildings, equipments are well marked.
- > Spillages are taken care of to maintain good work environment.
- Well-spaced plant layout
- Good work culture
- > Statutory compliance is good
- Well maintained plant

The following observations and recommendations are stated under different heads

#### 1) Safety, Health & Environment Policy:

The company has HSE policy declared on 1/7/2020. All persons are made aware about the policy and displayed at prominent places.

#### 2) HSE Committee:

It is not applicable as per rule; however, Company has safety committee. Arrange meetings every quarter. All injuries are to be discussed in meetings and ensure its implementations. MOM is distributed to all members and displayed on notice board at entrance of plant.

#### 3) Accident/Incident Reporting, Investigation, Analysis & follow-up:

All types of incidents (near-miss / minor or major) cases are partly reported, recorded and are discussed in meetings and analyzed to find the root causes. **Introduce near miss reporting system** 

Type, nature and bodily injuries etc. are to be identified. Root (Basic) cause(s) & Immediate cause(s) of accidents/ incidents, control measure(s) are mentioned in each accident investigation report.

In this connection it is stated that "Unsafe Condition(s)" where contract employees are involved are actually "Unsafe Act(s)" on the part of the Management. This concept will help the management for effective utilization of accident statistics and for taking preventive measures to avoid recurrence of similar incidents/accidents. **Injuries register shall be maintained.** Accidents register no: 29 is maintained and updated every month.

#### 4) HSE Inspection:

Third party safety audit is done regularly. **Detailed check lists are to be prepared for each of the critical operations and internal inspection is to be done by safety.** Internal audit is to be done every six months by cross unit team. Observations and recommendations are to be sent category wise to each section and to occupier and it is to be ensured by senior person that it is implemented.

#### 5) HSE Education & Training (safety consciousness & propagation):

Job specific Training is conducted. General safety training is given. All the workers are trained in health and safety by the institution duly approved by DISH as per section-111A of the FA 1948 every year on different topics.

Specialized training program on proper selection and use of PPE against different hazards, emergency response system, Electrical Hazards, IPA handling safety, work permit education, basic fire, MSDS awareness, work at height safety, lifting tools & tackles safety etc. is to be organized further.

#### 6) Work Permit system:

Company has work permit system. Ensure to follow strictly and safety shall be involved in issue of work permit.

#### 7) Hazard Identification and Control:

- Noise study is conducted every quarter. **Identify area as high noise area.** Use of PPE like safety goggles, safety shoes and hand gloves are ensured all the time. Carried out audiometry test for high noise affected employees every year.
- Ventilation is adequate in plant and warehouse.
- Illumination level is measured quarterly. Carried out optometry test every yearly for all.
- Safe operating procedures are prepared. Shall display do's and don'ts at machine
- Regarding machine guarding, all rotating machines shall be ensured with machine guards.

#### 8) Personal protective equipments (PPE):

Helmet, Hand gloves, safety shoes & safety goggles are used by workers working in all area, ensure ear plugs in high noise area.

#### 9) Fire protection Arrangements:

Fire extinguishers are provided adequately at all places. Servicing is not done since > 1 year and no tag display of service. Service shall be done every quarter as per IS 2190 and display tag of service date and due date. Hydrant points and hose reels are provided adequately in shop. Ensure servicing of hydrant valves every quarter. Ensure pressure in hydrant lines at 7.0 Kg/cm² in auto. At present pressure is 3.0 Kg/cm² in lines.

#### 10) Emergency preparedness:

Old emergency response plan prepared by Ryker base is followed, however it shall have all details of emergency equipments, fire equipments, fire alarms, its emergency code etc provided at site and all details of SMC, IC, DIC and Key personnel. **Hence prepare plan newly as per annexure 33** 

#### 11) Waste disposal system:

Consent is obtained from GPCB; all environmental monitoring is carried out periodically from third party.

There are many lifting tools including forklifts and are inspected every year from competent person under section-29 of FA.

There are two pressure vessels identified and form-11 obtained regularly from competent agency. Ensure red mark on the SWP at pressure gauge on pressure vessel as per rule 61, sub rule 4 (b) of FA.

#### 12)<u>OHC</u>:

Contract workers and company employees are checked medically every year. Maintained Form-32 and form-33. Ensure pre-medical checkup for contract persons and maintain form-33 for them also.

- 13) Certified first aiders and fire fighters are not available. Only internally trained 7 first aiders and one fire fighter are available. shall train at least four fire fighter and first aider from recognized institute.
- 14) IPA tank earthing shall be in double with separate earth pit. IPA day tanks shall be earthed adequately with flame arrestor in vent
- 15) All IPA and NG pipeline flanges shall be provided with continuity strip to equalize potentials developed during transfer. Ensure at all flanges positively.

- 16) All IPA and NG pipelines shall be checked for its healthiness every year
- 17) HC detectors shall be installed in IPA storage & usage area and NG manifolds & receiver
- 18) Oil drums shall be stored in vertical position always to avoid shear stress on top and hence leakages.
- 19) IPA dosing pump area shall be free and approachable from all sides. Avoid storing wooden boxes near pump assembly. Earth pump and motor

#### 20) Electricals:

- panel substation shall have display of Single line diagram
- Earth pit lay out drg is prepared and Earthing pit is numbered as per earth pit lay out drg.
- All earth pits shall be measured for resistance every six month. Once internally and once from third party
- All motors shall be double earthed at body of motor.
- Individual four earth pits with two individual body earth strips and two individual neutral earthing strips for transformer and DG is provided and ensured.
- Transformer oil shall be checked for BDV every six months and DG analysis every two years.
- Shall provide all displays as per rule and as per list attached in annexure.
- ELCB for light fittings is provided in lighting db.
- Rubber mats have put in front and back side of all electrical panels in all places.
- Master list of drawing is prepared, showing all electrical drawings available.
- Electrical --inspection reports, approved drawings are available.
- Area around all panels shall be maintained in neat and clean position. Avoid storing any material in front of panel in shop.
- All panel doors are closed, shall ensure it always.
- Body earthing to all machines is to be ensured.
- Smoke detectors are provided in all area, however shall activate it as early as possible
  - MSDS Of all raw materials are Available.
  - Emergency Telephone No List (internal & external) is to be displayed at security office in big font.
  - All instruments are calibrated every year, ensure tag on each instrument

The people are co-operative and management is taking very keen interest to maintain & improve safety of plant. Everybody at senior level have positive approach to increase safety of plant & workmen. It is appreciated that safety awareness is developed at each level of employees and everybody follows safety rules to keep equipment, plant and himself safe. Management has taken all recommendations positively and ready to comply all before next audit.

This audit is carried out under the legal requirements directive given in IS: 14489.We have sincerely tried to adhere to the terminology and methodology of IS: 14489 2018 and gone through the maximum details suggested in Annex A to C thereof.

The observations and recommendations are based on information supplied to us by the company and our plant visits. The points of our detailed plant visits are summarized.

We are thankful to the Asset Head and officers and workers of the Company for their full co-operation.

Our report consists of some recommendations to improve safety of plant. We hope that Considerations may be given to them at earliest.

D. M. Vaidya

B.E. (MECH), F.I.V., M.I.E., M.I.I.P.E.

Chartered Engineer & Competent Person

Govt. Regd. & Approved Valuer

**PROPRIETOR** 

**D.M. VAIDYA & ASSOCIATES** 

M. M. Patki

B.E. (CHEM), M.I.E., M.I.I.Ch.E.

Chartered Engineer & Competent Person

Safety Auditor

SR. ASSOCIATE

**D.M. VAIDYA & ASSOCIATES** 

# Section 4 Statutory Compliance, Observations & Recommendations

#### APPLICABLE LAWS AND STATUTORY COMPLIANCE

All activities are to be subjected to the present safety audit. For this, inspection was carried out and this was also aimed to promote contact with the working personnel. This helped to achieve the company's interest and concerns, to gain working personnel involvement, to encourage comments and suggestions relating to safety and to invite co-operation in discovering conditions which need correction so that the company's safety standards are in line with that of approved safety standards.

Based on the above criteria and discussion, the scope of safety audit was limited as given below:

Sr. No.	_		Observations	Recommendation/ corrective actions		
	Authority & Licer	ises				
1	Occupier	As per Rule 2 (n) of The Factories Act(FA)	Mr. Bishnukumar. N. Agarwal, Director has been declared as Occupier.	-		
2	Factory Registration & license	As per rule 6 of FA	Available. Lic. No.: 35608  Valid up to 31.12.2023. Strength of unit: 67 permanent employees + 177 contract persons.	-		
3	Approved Plan	As per rule (1) of Section 6 of FA and Rule 3, 3(A) and 3 (B) of GFR.	Approved via: DISH/IS &H/F-PLAN/4408/2018	-		
4	Petroleum Storage License	Petroleum Rules, 1976	N.A.	-		
5	Storage of Compressed Gas.	SMPV Rule 18, 19, 44/2	N. A.	-		
6	Cylinder Storage license	As per Gas Cylinder Rule, 1981(amended- 2004	N.A.	-		
7	Water Act 1974, Certificate from Air Act 1981 &		Water, Air, Pollution consent no: WH:102752 valid up to 8/5/2024 Amended in 2022	-		
8	Public liability Insurance.	Public Liability Insurance Act 1991	N.A.	-		
	Health, Safety &	<b>Environment Compl</b>	iance			
9	Safety & Health Policy	Under Section 41- B of FA and Rule 68-O of The Gujarat Factories Rules (GFR))	HSE Policy is prepared and followed	-		
10	Safety Committee	Under Section 41 (G) of FA and Rile 68 (F& Y) of GFR	N.A. However, HSE Committee is formed. Meetings are arranged every quarter	Ensure strength 50:50 of worker and staff		
11	On Site Emergency Plan	Under Section 41 B of FA & Rule 68-J (12) of GFR	Old ERP of Raker Base is followed which is not up to date.	Shall prepare newly in details in annexure-33		
12	Mock Drill	As per 41-B of FA & Rule 68-J (12) of GFR.	Not since long time> a year	Ensure mock drills once in six months positively		

13	Safety Report	As per Rule 68J (9) of GFR and Schedulew-8 of GFR	N.A.	-
14	Safety Manual	Rule 68K of GFR	N.A.	-
15	Accident Records	As per Rule 88 of FA	Accident record is maintained in all respect. Statutory compliance in Form 29 [register] is maintained.	Maintain injuries record and investigate it
16	Periodic Medical Exam to prevent occupational diseases.	Statutory requirement as per Schedule XIX of GFR.	Periodic Medical examination is carried out by qualified doctor. Form-32 maintained every year for all and form-33 for employees.	Ensure form-33 for contract people also
17	Occupational Health centre	As per Rule 68 U of GFR.	N.A. however provided and doctor visits twice in week for 2.0 hrs 3.0 First aid boxes are provided	-
18	Safety Training	As per 41 B & Section 111 of FA.	Training is given on general safety	Shall train them on different safety topics including emergency response and solvent safety, static charge safety and electrical safety.
19	Work Permit	As per 64, Part – II (Gen. Requirement) Schedule – XIX of FA & Rule 89 to 91 of GFR.	system is followed. LOTO procedure under process	-
20	Lifting tackles & lifting Machines	As per 28,29 of FA & Rule 60 of GFR.	Form no. 10 is maintained for lifting tools.	-
21	Pressure vessels	As per 31 of FA & Rule 61 of GFR.	Pr. Vessel exists, tested & record is maintained.	Shall display RED mark on SWP at pressure gauge as per rule-61, sub rule-4 (b).
22	Material Safety Data Sheet. [M.S.D.S]	As per Rule 68-J Schedule-V of GFR.	Available	-
23	Work place monitoring.	As per 7A (a) (e) of FA & Rule 12-B of GFR.	Available for total dust, Sox, NOx, noise, IPA every quarter	Monitor RSPM every quarter and maintain form-37 quarterly. SOx and NOx are not required to fill in form-37.
24	Firefighting, fire water system.	Rule 66A, 66	Portable fire extinguishers and hose reels/hydrants are available in plant. Testing records of all extinguishers are not available for > a year	Ensure servicing of FE and Hydrants every quarter as per IS 2190. Ensure water pressure in auto in hydrant lines
	Training in First Aid & Fire Fighting	Factory Act 41 B & Schedule-XIX.	Available internally trained 07 first aiders and 01 fire fighters at site.	Ensure one in each shift trained from recognized institute
26	Safety Showers	As per 41C and rule 73Y of FA	Portable eye wash provided	-
27	Stability Certificate	As per Sub-Section (1) of Section 6 of FA and Rule 3© of GFR	Obtained on 26/10/2018, valid up to 25/10/2023. Certificate has no competency number of competent person.	Ensure certificate from competent person authorized from DISH.
28	Dryers & Ovens / flakers.	As per Rule 68 G of GFR.	N.A.	-

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29	Centrifuge	As per schedule V of GFR.	N.A.	-
30	Dust Extraction and Scrubbing System	As per Rule 102 of GFR.	N.A.	-
31	Lighting Arrestors	As per Section 37 of the Factories Act 1948.	Provided and adequacy checked	-
32	Earthing for Static Electricity.	As per Section 37 of the Factories Act 1948.	Partly provided	Shall ensure wire braided hose for HSD transfer. Provide bonding to each flange of NG and IPA lines. Earth all IPA/HSD tanks.
33	Machines guarding.	As per Section-21 of the Factories Act 1948.	Mostly provided	-
34	Ambulance Van	As per the Rule 68-V of GFR 1963.	Emergency vehicle is available 24 x 7	-
35	Transportation of hazardous material.	As per the Motor Vehicle Act.	Identified	-
36	Workman Compensation Compliance	As per the Workman Compensation Act.	Being complied.	-
37	Wind Indicator.	As per the Rule 68(J) (12) of the GFR 1963.	Provided	-
39	Personal Protective Equipments.	As per the Rule 68B & Schedule XIX of Rule-102 of GFR 1963.	Non-Resp. PPEs are available.	-
40	Safety Audit / Risk Assessment / HAZOP	As per the Rule 12 (C) / 68(O) of GFR 1963.	Safety Audit being done every two years	-
41	Thermic fluid heaters	As per rule-68 D of GFR	N.A.	-
42	Power press	As per section 21 of FA	N.A.	-

# Section 5 Observations & Recommendations - Plant

Sr.	Storage area		
No.	Observation	Location	Recommendations
1	Oil drums stored horizontally in rack	Oil storage area	Always ensure storing drums in vertical position to reduce stress on top of drum and to reduce chances of leakages from top. Also ensure secondary containers for all drums.
2	Scrap material near oil storage and approach restricted	Oil storage area	Ensure area neat and clean and free walkways towards emergency exit
	IPA Storage & usage area of IPA and NG	l	
1	Flange bonding not observed on line	IPA/NG carrying lines	Provide continuity strip on each flange to ensure 100% equalization of potentials developed during transfer.
2	Water observed over underground tank	U/G tank storage	Ensure to collect water to avoid corrosion of tank.
3	Tanks receiving IPA for mixing are not earthed	Emulsion tanks-2 no & cleaner tanks-2 no	Ensure body earthing to tanks to dissipate all potentials transferred to tank with IPA.
4	IPA charging is from top in day tank	IPA overhead day tank outside shop	Ensure charging on walls of tank or dip pipe to avoid more static charge due to flashing.
5	Loose cable without identification	Near IPA charging pump area and near oil storage area near furnace	Identify both ends to ensure no wrong reconnections if required.
6	Pump area approach is restricted with wooden boxes	-do-	Ensure approach free and avoid storing fire prone wooden material near pumps.
7	Earthing given in series and motor and tank earthing mixed in one pit	22 KL U/G IPA tank	Ensure double earthing to tank in parallel and do not mix motor earthing and tank earthing together.
8	Small FE of 6.0 KG is provided and sand buckets has no free flow sand	-do-	Shall have at least 50 KG capacity and ensure free flow sand with canopy on bucket stand.
9	No bonding of line flanges	-do-	Ensure it always.
10	No HC detector in area	IPA storage & usage area, NG receiver and manifolds	Shall provide HC detectors in cross wind direction to detect vapor from any corner with any direction of wind.
11	Pump discharge is connected with rubber hose to line	22 KL U/G IPA tank	Ensure permanent line to day tank and if required use wire braided hose to maintain continuity

12	IPA day tank not earthed and no flame arrestor on vent	Overhead tank outside building.	Earth tank and provide flame arrestor on vent of tank.
13	Crocodile earthing of tanker is broken	Tanker earthing	Ensure full proof earthing to tanker with separate earth pit.
14	Hydrant point is nearer to tank	Inside fencing of IPA storage	Ensure hydrant point outside gate or ensure monitor outside.
	Workshop & other Area		
1	Oil spillage is heavy in area	Oil drum storage room near furnace area	Ensure collection of spillages with spillage control procedure to avoid any slip injury.
2	Earthing is in series	Caster pumps	Ensure individual parallel earthing to main strip.
3	Single earthing to motor	-do-	Ensure double earthing to each motor.
4	Motor earthing double from one point and in series	Electric panel room near caster pumps	Ensure double earthing from two different points to two individual earth pits in parallel.
5	Control room has emergency door opening inside	Control room of furnace	Shall ensure doors to open outside from room as per GFR
6	Panel of 440 volts has no danger board and rubber mat	Near furnace at GF	Ensure danger boards 440/230 volts and ensure rubber mats at 440 volts panel always.
7	No emergency light in room	Control rooms	Ensure it always as per GFR.
8	No display of emergency contact number list	-do-	Display it in big font in all control rooms.
9	Railing and NG lines have same yellow colour	Furnace area	Provide black strips on railing to identify it separately.
10	HSD tank not earthed and fiber braided hose is used to transfer HSD	Fire pump house	Ensure earthing to tank of Diesel pump and use wire braided hose to transfer HSD to provide continuity for static charge developed during transfer.
11	Pendent power is on and no one observed in area	Mech. Work shop	Ensure always to close main switch of lifting tool whenever it is not used for > 1.0 hr. train operators accordingly. There are chances of accident if untrained person operates it unknowingly
12	Fire pump house is in remote area with two locks to reach there	Fire pump house	Provide direct approach to pump house and ensure readings in log book every two hour for pressure readings.
13	No earthing to motors	-do-	Ensure double earthing to each motor

14	Panel has no rubber mat	-do-	Ensure it
15	Silica is white in transformer	All transformers	Ensure replacement schedule for silica and keep silica blue always to avoid moisture entering in oil
16	Oil testing every year	-do-	Ensure to test oil for BD value every six months and if value is < 50, call filtration party and carry out filtration
17	Material stored up to ceiling and near to light fittings	Engg store	Ensure 1 meter distance from ceiling always as per IS requirement

# Section 6 Safety Questionnaire

SR	CHECKPOINTS	CURRENT STATUS	OBSERVATIONS AND RECOMMENDATIONS	
		C-1 OH & S MANAGEMENT		
	C-1.1 OH & S Policy (Rule 12-C and / or 68-O of the GFR 1963)			
1.	Does the organization have OH & S Policy?	Yes	-	
2.	Who has signed the OH & S policy?	Mr. Satish Pai, MD	-	
3.	Whether the OH & S policy is per guidelines of the statutory provisions?	Yes	-	
4.	When was the OH & S policy declared and adopted?	1/7/2020	-	
5.	Whether the OH & S policy reviewed periodically?	Yes, whenever any change in system	-	
6.	Whether the OH & S policy is available in local language and made known to all?	Yes	It is to be prepared in Gujarati and Hindi and displayed at prominent places like gate, offices, shops, notice boards etc.	
7.	What was the last date of updation?	Not yet	-	
		C-2 OH & S ORGANIZATIONAL SET UP		
	C-2.1 Safety Department - The FA Section 40-B			
8.	Does the factory have a safety department and what is strength of safety department?	Yes, 01		
9.	Whether the strength and qualifications of Safety Officers are as per the statutes?	Yes		
10.	Does the head of safety department report to the Chief Executive?	VP Operations		
11.	How often are the safety officers retrained in the latest techniques of total safety management? What is the frequency of retraining?	Yes, once or twice	-	
12.	What additional duties the safety officer is required to do?	No any other than EHS	-	

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13.	What is the power of safety officer vis-a-vis unsafe condition or unsafe act?	Yes, full power	-
	C-2.2 Safety Committee(s) (The FA Section 41-G, Rule 68-F,Y of the GFR 1963)		
14.	Does the factory has a safety committee(s)? What are the types, structures and terms of reference of the committees?	N.A. as per rule, but Yes	Ensure 50:50 strength of staff and worker
15.	Is the constitution of the safety committee(s) as per the statute?	Yes	-
16.	How are the members of safety committee(s) selected? (elected / nominated)	Nominated as per attitude towards safety	-
17.	How often are the meetings of safety committee(s) held?	Quarterly	
18.	Are the recommendations of the committees(s) implemented?	Yes	Followed as below:  a) The suggestions which are of real concern are implemented immediately by concerned HOD.  b) The suggestions where in major modification/ process change is required are studied for its technical feasibility and if found suitable, they are implemented as per the priority with Responsibility & Target time defined.
19.	Are the minutes of the safety committee(s) meetings circulated among the members?	Yes, by mails and displayed on notice board	-
20.	Are the minutes forwarded to the trade union(s) and chief executive and occupier?	No	Shall send MOM to MD and Occupier also
21.	Whether the management and trade union play their active roles in supporting and accepting the committee(s) recommendations?	No, as not sent to MD	follow as below:  1) The suggestions of the Safety committee are to be implemented on time bound basis  2) The progresses of implementation of the suggestions are to be reviewed by top management at their meetings periodically.  3) The members take regular feedback.  Action taken report. (ATR) is to be made and maintained
22.	How are the safety committee(s) members apprised of the latest development in safety, health and environment?	By discussions and interaction	-
	C-2.3 Safety Budget (The GFR- Rule 12-C & 68-0)		
23.	What is the annual safety budget?	1.2 lacs	-
24.	How much percentage is this budget of the total turnover of the company?	0.01%	it is very less, shall increase to 0.5 to 1.0% minimum

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25.	How much budget has been utilized till date?	40%	-
26.	Is the safety budget adequate?	Less	-
27.	How is the safety budget arrived at?	Not known	-
28.	What is the pattern of expenditure for the last five years?	Not known	Shall keep the record of expenditure profile
29.	What are the approved sanctions for the expenditure in this budget?	1.2 lac	It is suggested to segregate the expenses under various heads like  Safety equipment  Safety training  Risk assessment & its control  Loss prevention  Housekeeping  Safety inspection & statutory requirements
30.	Does this budget get reflected in the annual report of the company?	Not known	It is recommended to reflect safety related expenditure in the annual reports
		C-3 SAFETY MANU	JAL (The FA Section 41-B,41-C,41-H, GFR-Rule 68-K
31.	What is the periodicity of updation / review of safety manual?	N.A.	
32.	Does the safety manual adequately address all the hazards in the plant?	N.A.	-
33.	Are the employee made aware of safety rules?	Yes	-
		C 4 STANDARD OPER	RATING PROCEDURE
34.	Are written Standard / safe operating procedures available for all operations and processes?	Yes	-
35.	Whether the written Standard / safe operating procedures are displayed or made available and explained in the local language to the workers?	No	Dos and don'ts are to be displayed in local language at shop for each manual operation
36.	Whether concerned section and safety department prepares standard / safe operating procedure jointly?	Yes	
37.	Are standard / safe operating procedures reviewed and updated?	Yes, whenever required.	Whenever any accident including missed incidence takes place on equipment, the SOP is required to be reviewed. Records of change to be maintained.
38.	Have the workers been informed of the consequences of failure to observe the standard / safe operating procedures?	No	Needs continuous training in knowledge of material safety/machine safety/lifting tool safety at operator level.

		C-5 PLANT MODIFICA	TION PROCEDURES
39.	What is the system for effecting any change in the existing plant, equipment or process?	Yes, management sanctions and safety points are considered	
40.	Whether the P & I diagram and other related documents are updated accordingly?	N.A.	
41.	Whether hazard assessment done before implementation of modification?	Not yet	Shall ensure HIRA always
		C-6 WORK PERMIT S	YSTEM (The GFR- Rule 102 Chemical works Sch. 19)
42.	What types of work permits exist in the factory?	Hot work, cold work, work at height	-
43.	Are the necessary forms detailing required safety precautions have been prepared and used for each type of work-permit?	Yes	
44.	Is the responsibility assigned to authorized person for issuing of safety work permit?	Yes, it is signed by authorized person before work	
45.	Is the copy of safe work permit sent to safety officer before execution of the job?	No	it is to be ensured that safety dept should be involved in issue of work permit and he should sign permit before execution of work
46.	Is validity period specified in the safety work permit?	8.0 hrs	-
47.	Are the records of work permit available and maintained in proper order?	Yes	
	C- 6.1 Control Measures for Work at Height		
48.	Is adequate safe access provided to all places where workers need to work?	Yes	
49.	Are all such access in good condition?	Yes	-
50.	Are all scaffolds are properly designed and erected?	Yes, it is used by contractor	
51.	Are scaffolds inspected every day before work begins?	Yes, if required	
52.	Are ladders securely clamped or lashed in place?	Yes	Ensure steps of ladder as per rule 66 and 66 A of GFR
53.	Are planks in good condition?	Yes	

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54.	Are scaffold walkaways, platforms, runs or stairs free of debris, grease, any unnecessary obstruction and projecting nails?	Yes	-
55.	Are the scaffolds higher than 20 m.? If yes, is netting or intermediate railing provided between toe-boards and hand railings?	N.A. at present	
56.	Are folding stepladders properly used?	Yes	-
57.	Are ladders set up at the proper slope of about 1:4?	Yes	-
58.	Do workers use hand lines to lift tools or materials?	N.A.	
59.	Are proper ladders used around electrical hazards?	Yes	
60.	On sloping roofs, are crawling boards, lifelines, safety belts and edge protection provided where needed?	Yes	
61.	Whether the weak spots, skylights, or deteriorated asbestoscement boards through which a worker might fall while working in the roof has been identified and safety net provided appropriately?	N.A. at present	Shall ensure wherever it is needed
62.	Are the workers being medically examined for their fitness to work at height?	Yes	Ensuring always their fitness certificate before to go for work at height
	C-6.2 Work in Confined Space (The FA Section 36, GFR-Rule 102 Schedule 19)		
63.	Is work permit system followed for working in confined space?	N.A.	However, shall follow whenever it is required to enter into furnace and IPA tank for cleaning
64.	Whether monitoring of the atmosphere inside the confined space is carried out and ensured that there is no flammable or toxic gas in the area?	N.A.	-
65.	Whether the person entering the confined space is using suitable personal protective equipment (PPE)?	N.A.	
66.	Is rescue team available in case of any emergency?	N.A.	
		C-7 CONTRACTORS'	SAFETY SYSTEM
67.	Is there any system for selection of contractors?	No	selection shall be done depending on experience, training and safety record
68.	Are there any guidelines on contractor's safety and training?	No	However, training is given before go to work
69.	Whether contract document includes necessary safety and welfare clauses as per statutes?	No	Shall ensure safety clauses after preparing contractor's selection policy

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70.	Is there any program to ensure use of PPE by contractor's personnel?	Yes, it is ensured at shop	Company is made responsible for PPE of their workers.
71.	Do the contractors have their own safety organization?	Not necessarily	-
72.	Are the contractors reporting all accidents and injuries?	Yes	-
73.	Are contractor workers trained to observe safety at work place?	Yes, internal training/job specific training given before start of work.	
74.	Whether contractor workers are engaged in process / operations? If yes, are they aware of safe operating procedures?	Yes, for forklift operation and casting operations	They are trained for SOP, however train them for consequences for not following SOP
		C-8 PLANT DESIG	N AND LAYOUT (The FA Section 87, GFR-Rule 102)
75.	Whether hazardous operations in the plant are segregated?	Yes	-
76.	Whether occupational health & safety aspects are considered during the design?	Yes	-
77.	Are all the equipment provided with adequate space for working, maintenance etc.?	Yes	-
78.	Are the storage tanks provided with enough space Clearance between them?	N.A.	-
79.	Whether the plant layout has taken care of the movement of firefighting equipment and emergency exits?	Yes	Ensure free approach to FE and Hydrant points
		C-9 MEDICAL MANA	GEMENT OF ACCIDENTS (The FA Section 45, GFR-Rule68-U,68-V,71)
80.	Are medical facilities available with trained first aid staff and equipment in round the clock shift for all including contractors?	N.A., But OHC is available	Doctor visits twice in a week for 2.0 Hrs
81.	Is the ambulance van available for round the clock basis with the dedicated driver?	N.A.	Emergency vehicle is available 24 x 7
82.	Is there any mutual aid scheme available with the nearest hospitals to manage and treat injuries during emergency?	Nand Hospital at Halol and Rythem Hospital at Vadodara	-
83.	Are the workers / contractor workers aware of emergency medical facilities?	Yes	
		C-10 MANAGEMENT O	F EMERGENCIES (NATURAL / MAN-MADE)
84.	Does the system exist to detect and control these Emergencies?	Yes, Emergency Response Plan is prepared but not adequate	Shall prepare with all details.

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85.	Are the employees aware of the measures to be taken during emergencies?	Mostly	Details shall be mentioned in the emergency response plan as well as <b>employees are to be trained periodically</b> .
		C-11 EMPLOYEES SEL	ECTION AND PLACE- MENT
86.	Whether norms are available for selection of different category of employees?	Yes, HR policy is prepared and followed for selection	
87.	Whether pre-employment medical examination is being conducted for employees?	Yes, examination is done and documentation is maintained in form-33 for staff members	-
88.	Is there any procedure to evaluate safety awareness and record of the employees during their promotion?	Partly	safety performance shall be considered during promotion It shall be minimum 20%
		C-12 SAFETY CULTURE	
	C-12.1 Attitudes of Managers		
89.	Do the managers follow the plant safety rules at all times?	Yes	Safety Rules are prepared, Communicated, Displayed, and being followed. However, needs improvements
90.	What are their attitudes towards safety reviews and audits?	Partly Positive	Ensure compliance of recommendations
91.	What is the response of management to safety violation?	Recognition and consequence guidelines are prepared & being followed for the purpose.	
92.	Whether safety related decisions are taken in consultation with the workers?	Yes	Through safety suggestion scheme, safety committee meeting, communication meet, etc
93.	What is the attitude of the managers towards no nuse of personal protective equipment?	positive	-
	C-12.2 Attitudes of Workers		
94.	Whether workers are aware of the consequences of their wrong actions?	Yes	Made them aware through training and awareness program. The process of awareness should go on always
95.	Are laid down safe working procedures followed strictly?	Yes	-
96.	What is the attitude of the workers towards their own mistake, which can prejudice safety?	Positive and report it	-

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97.	Do the workers report near miss incidents and suggest safety improvements?	No	Introduce system and motivate to report.	
98.	Are the workers aware of the system of rewards and sanctions relating to safety matters?	Yes	However, shall continuously aware them.	
99.	What is the attitude of workers towards use of personal protective equipment?	The attitude of workers was found positive for the use of PPEs	Train them frequently for use of PPE and make them aware about occupational disease and accidents during non-use of PPE.	
		C-13 STATUTORY LIC	ENSES, APPROVALS AND RECORDS	
100.	Whether all the safety related Acts / Rules (with latest amendments) applicable to your organization identified, informed to all employees and complied?	Yes, the details are given in chaptor-4 of this report		
101.	Whether the licenses have been validated?	Yes		
		C-14 MOTIVATIONAL	AND PROMOTIONAL MEASURES FOR OH & S	
102.	Does the factory have occupational health and safety suggestion scheme?	No	Provide safety suggestion box and motivate them to give suggestions	
103.	Are occupational health and safety contests organized in the factory?	Yes	Organize Various activities like Safety poster, Safety poem writing, slogan writing, essay competition during safety day celebration	
104.	Does the factory participate in National Awards?	No		
105.	Has the factory been awarded during last five years?	N.A.		
106.	Does the organization publish safety bulletin? /Newsletters?	Yes	-	
107.	Whether the safety bulletins are widely distributed?	Yes, online	-	
108.	How is the occupational health and safety information including accident statistics disseminated in the factory? (Bulletin boards, Newsletter etc.)	By display	It is displayed on notice board as well as are discussed in meetings	
109.	What are the activities conducted during National Safety Day / week?	Safety week celebrated	Organizes Various activities like Safety poster, Safety poem writing, slogan writing, essay competition during safety day celebration	
110.	What is the percentage of Workers participating in the various safety promotional activities?	Mostly all	-	
	, ·	C-15 HAZARD IDENTIFICATION AND JOB SAFETY ANALYSIS		
111.	Was an initial process hazard analysis (PHA) completed?	No	Ensure HAZOP for IPA unloading, IPA storage and IPA transfer	

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112.	What are the stages of PHA? Whether a dedicated group is identified for PHA?	N.A. as no HAZOP	-
113.	Was the PHA appropriate for the complexity of the process and identify, evaluate, and control the hazards involved in the process?	N.A. as no HAZOP	-
114.	Does the hazard evaluation use one or more of the following PHA methodologies: What-If Analysis, Process Checklist, Hazard and Operability Study (HAZOP), Failure Mode and Effects Criticality Analysis (FMECA), Fault Tree Analysis (FTA) or any other appropriate equivalent methodology?	N.A. as no HAZOP	
115.	Does PHA assure addressing issues of inherent safety features with respect to material and their properties?	N.A. as no HAZOP	-
116.	Does the PHA address the hazard identification, incidents history, consequences of failures (engineering and administrative controls), human factors, consequent analysis with respect to possible safety and health effects of failure of controls?	NO	Ensure QRA for IPA storage
117.	What are the stages of PHA? Whether a dedicated group is identified for PHA?	N.A. as no HAZOP	-
118.	Does the system exists to promptly address findings and recommendations of PHA?	N.A. as no HAZOP	-
119.	Are the PHA's updated and revalidated at least every five years by a qualified team to assure that the PHA is consistent with the current process?	N.A. as no HAZOP	-
120.	Whether the activities requiring Job Safety Analysis have been identified?	No	Shall do it for furnace and casting operations
121.	Whether the identified jobs for Hazard Identification have been carried out by trained and experienced persons?	Yes, HIRA is done by experienced person	-
122.	Whether the checklists have been prepared on each Job Safety Analysis and are being used while carrying out the job?	No	Shall prepare and follow
		C-16 PRODUCT SAFETY	
123.	Whether hazards arising from use of the products are identified?	Yes, Physical Hazards	-
124.	Whether material safety data sheet prepared for the products?	N.A.	
125.	Are all the products labeled and packed appropriately?	Yes	
126.	Whether safety instructions are given along with products?	Yes	-
127.	Whether policy exists for recall of products?	N.A.	-

		C-17 SAFETY TRAININ	IG (The FA 1948-Sec 111(A), 7( A)
128.	Whether training needs have been identified?	Yes, but no any internal safety training for one year	it is to be identified through needs of work and process parameters Training is given on general safety and job specific. Shall organize training on proper selection and use of PPE against different hazards, emergency response system, SOP awareness, housekeeping awareness, rescue operation, EOT Operation, MSDS awareness, Electrical safety, static charge safety, consequences of not following SOP, IPA handling safety and BBS
129.	Is there any program of induction training, its duration and topics covered?	Yes.	Induction training is given by safety dept before issuing gate pass and training is imparted using audio-visual facilities for 2 hrs and concerned job safety topics covered.
130.	Whether the assessment of the trainees has been carried out?	Verbally	-
131.	What are the infra-structural facilities available for training?	Yes	Training room has all the multimedia facility, like LED, Speaker, Projector
132.	Whether training is conducted by qualified person?	Yes, training is conducted by qualified person	
133.	Whether trainers are being re-trained from time to time?	Not since last one year	Train them every year and record of retraining to trainers is to be maintained.
134.	Whether proper records of training program conducted are maintained?	Yes, for third party training	Training attendance sheet is to be maintained for various trainings.
135.	How training programs are evaluated?	The training program is evaluated by assessment	
136.	Whether schedule for training on occupational health and safety is available and maintained?	No	Shall conduct first aid training
137.	Whether the training programs are reviewed?	No	Training programs shall be reviewed as per the requirements, like addition of hazards, tech advancements, change in process etc.
138.	Are all the employees periodically trained / retrained and what is the frequency of such training?	Not since last one year	Prepare calendar and train them periodically in topics mentioned in 128
139.	Are the retraining needs identified whenever a new process / product and change in existing process introduced?	Yes	Persons are being trained in case of any change in processes
140.	Whether training covers top management?	Yes, on line globally	-
141.	How many hours of safety training is given to different employees?	N.A. as no any last year figure	Training hours is to be decided for the employees as per the job requirements, nature of job. & type of training

		C-18 CHANGE MANAGEMENT	
	C-18.1 Management of Change		
142.	Are there written procedures for managing change to process chemicals, technology, equipment and procedures and changes to facilities that affect the plant process / system operation?	Yes	-
143.	Do the procedures assure that the technical basis for the proposed change addressed prior to any change?	Yes	MOC procedure state that any recommendations proposed are to be complied while affecting any change
144.	Do the procedures assure that the impact of the change on safety and health addressed prior to any change?	Yes	it is covered
145.	Do the procedures assure that modifications to operating procedures are addressed prior to any change?	Yes	
146.	Do the procedures assure that the necessary time period for the change is addressed prior to any change?	Yes	
147.	Do the procedures assure that the authorization requirements for the proposed change are addressed prior to any change?	yes, it is assured	
148.	Are employees involved in operating a process, and maintenance and contract employees whose job tasks will be affected by change informed of, and trained in, the change prior to the start-up of process or affected part of process / operations?	Yes	
149.	Is the safety information is reviewed and updated on changes?	Yes	
150.	Are the operating procedures or practices updated?	Mostly	SOP and work instruction are to be updated after affecting MOC
	C-18.2 Mechanical Integrity		
151.	Does the mechanical integrity program include for all mechanical equipment including pressure vessels and storage tanks, piping and components, relief devices and vent systems, emergency shutdown systems, pumps, control systems?	Yes	PMS which covers all the equipment to ensure the mechanical integrity, Periodic maintenance schedule is developed & being followed.
152.	Are there written procedures to maintain the on- going integrity of process equipment?	Yes.	Engineering Services has prepared SOP and work instruction for same being followed
153.	Whether training been provided to each employee involved in maintaining the on-going integrity of process equipment?	Yes	Needs improvement
154.	Are inspections and tests performed on each item of process equipment included in the program?	Yes, Maintained and tested as per PMS	
155.	Do the inspection and test frequencies meet the manufacturer's recommendation and good engineering practice?	Yes, tested as per recommendation	

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156.	Are inspections and tests performed more frequently if determined necessary by operating experience?	Yes	PMS is regularly reviewed and updated
157.	Are deficiencies in equipment that are outside limits corrected before further use so as to assure safe operation?	Yes	Tested after repair in before use
158.	In the construction of new plants and equipment, whether quality assurance program is implemented to ensure that equipment fabricated is suitable for the process?	Yes	The quality assurance program for new equipment Is in place
159.	Are appropriate checks and inspections made during equipment installation stage?	Yes	New equipment is installed as per OEM guidelines
160.	Are the suitability of maintenance materials, spare parts and equipment ensured during maintenance?	Yes	Adequate quantity of spare parts is being maintained
		C-19 PHYSICAL HAZARD	
	C-19.1 Housekeeping (The GFR – Rule 16, 17, 17 A, The FA 1948 section 11.)		
161.	Are all the passages, floors and the stairways in good condition?	Partly yes	Shall ensure to remove scrap materials like woods, bags, metals etc from work place
162.	Is glass door taped or otherwise marked to make it visible to workers?	N.A.	
163.	Do you have the system to deal with the spillage?	Partly Yes	All spillage and scrap is to be collected and is kept in its proper place.
164.	Do you have sufficient disposable bins clearly marked and whether these are suitably located? Are containers of refuse (waste) and trash emptied at the end of every day or soon after they are full? Are the containers or bins regularly cleaned?	Yes	-
165.	Are drip trays positioned wherever necessary?	Yes	-
166.	Do you have adequate localized extraction and scrubbing facilities for dust, fumes and gases? Please specify.	N.A.	-
167.	Whether walkways are clearly marked and free from obstruction?	Yes	-
168.	Do you have any inter-departmental competition for good housekeeping?	N.A.	-
169.	Has your organization elaborated good housekeeping practices and standards and made them known to the employees?	Yes	5 S followed
170.	Are there any working conditions, which make the floors slippery? If so, what measures are taken to make them safe?	Yes, in oil drum storage	Ensure to clean it regularly
171.	Does the company have adequate measures to suppress polluting dust arising out of materials stored on the roadside?	Yes	Tar road and cement roads are provided at all places in site to have proper approach to all places.

	C-19.2 Machine and General Area Guarding (The GFR – Rule 54, The FA 1948 section 21,22.)		
172.	Whether machinery and equipment which can cause physical injuries to operator have been identified?	Yes	
173.	Are all moving parts and point of operation of machinery adequately guarded?	Partly	-
174.	Are all fixed guards securely bolted in position and in good condition?	Yes	-
175.	Are all interlock guards for prevention of physical injury in good condition?	Yes	
176.	Are all emergency stop buttons effective and clearly labeled?	Yes	-
177.	Are the operators for machines having moving parts aware of the danger of working with loose clothing?	Yes	-
178.	Are the openings where there is free fall hazard covered or fenced securely?	Yes	-
	C-19.3 Material Handling (The FA 1948 section 28,29,34, The GFR – Rule 58,59,60,62)		
179.	Are adequate equipment available for handling materials?	Yes	Required lifting devices are available.
180.	Are the workers aware of the hazards associated with material being handled?	Yes	Specific training is to be imparted about hazards & their mitigating measures for material handling
181.	Where manual handling is necessary, are the workers been trained? Do they practice this? Are workers warned for lifting of excessive weight? (Maximum weight of material for adult male and female are 55Kg and 30 Kg respectively)	Manual handling is required but needs improvements	Training on Kinetic Method to be organized for all workers & record is to be maintained.
182.	Do workers follow safe procedures for storage of materials?	Yes	-
183.	Is the register maintained to record particulars of examination of all lifting machines, tools and tackles?	Yes	
184.	Are all the statutory examinations and tests carried out and certified by competent person(s)?	Yes FORM-10 is obtained	A third-party D. M. Vaidya & Associates is engaged to carry out test and Competent person Mr. Vinod Gohil has verified the tests.
185.	Are the operators of crane, lifts, hoists and other mechanized operations adequately qualified?	Yes, but retraining required	Ensure pendent power off during non-use of lifting tool for>1.0 hr. Retrain operators yearly for refresher training.
186.	Is the safe working load clearly marked?	Yes, SWL is marked on all tools & tackles	
187.	Has the person employed to operate crane, forklift, or to give signals to crane been medically examined for eyesight and color vision?	Yes, yearly	-

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188.	Is the frequency of eyesight and colour vision examination as per the latest rules?	Yes, for employee and contract persons every year	-
	C-19.4 Electrical Safeguarding		
189.	Are licensed electricians available for electrical work?	Yes	
190.	Whether area classification for electrical equipment has been carried out?	N.A.	-
191.	Do the electrical fittings conform to area classification for electrical equipment?	N.A.	
192.	Is a ground fault current interrupter system (ELCB) in use?	Yes	-
193.	Are all connections made by using appropriate plugs, receptacles or enclosures? Are fuses provided?	Yes	Ensure plugs, avoid two wires inserting in plug pin. Use junction box for connections
194.	Are there any make shift connection bare wires or damaged cables?	Loose cables found	Identify loose cables at both end with number
195.	Is there a system of ensuring periodical inspection of hand tools, extension boards used for electrical work?	Yes, as & when required	Record to be maintained
196.	Do the workers use proper types of PPE during the working on live line?	Yes	
197.	Is the separate work permit issued for working on high voltage line?	Yes	LOTO is in process.
198.	Whether the process(s) and equipment that generate and accumulate static charge have been identified?	Partly	IPA, NG, HSD transfer can generate static charge
199.	Whether all such equipment including pipelines for flammable materials are properly bonded and earthed?	Partly	Shall provide earthing to HSD tank, use wire braided hose for transfer, ensure bonding of each flange in NG/IPA transfer pipelines
200.	Whether earth pit resistance is measured and the record maintained?	Yes, yearly by third party	
201.	Whether lightning arrestor has been installed and is adequate?	Yes, installed on building	Study of Lightning protection is arranged to ensure that all areas are protected for lightning as per IS.
	C-19.5 Safety in Storage and Warehousing		
202.	Whether the Material Safety Data Sheet for all chemicals is available?	Yes	Ensure it at work place
203.	Are the chemicals stored as per their hazardous properties including the incompatibility?	N.A.	-
204.	Are all containers clearly, indelibly labelled? Are all chemicals stored as per safety regulations?	Yes	-
205.	Whether all racks and steel cages have sufficient load bearing capacity?	Yes	Display rack capacity at each rack

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206.	Is adequate natural ventilation provided to store room? Is there any emergency exit?	Yes	
207.	Whether adequate firefighting arrangement existing in flammable chemical storage?	Yes	-
208.	Whether methodology for handling spillages of hazardous chemical available along with the equipment required handling the spillage?	No	Ensure it for oil in oil storage
209.	Whether aisles are marked and emergency exits displayed?	Yes	-
	C-19.6 Hazard Assessment for New Equipment		
210.	What is the system for effecting any change in the existing plant, equipment?	Yes, MOC is in place	-
211.	Is there system for evaluating hazards from new equipment?	Yes, HIRA is done	-
212.	Whether the P and I diagrams and other related documents are updated accordingly?	N.A.	
213.	Is any Job Hazard Analysis (JHA) carried out after installation of new equipment?	No	Shall do JHA for new installations
	C-19.7 Hazards from Radiation Sources		
214.	Whether licenses have been obtained for storage /handling of radioactive material?	NA	
215.	Whether approved Radiological Safety Officer appointed?	NA	
216.	Whether appropriate PPEs are used against radiation hazards?	NA	
217.	Is the flooring of the radioactive material handling area amenable for proper decontamination?	NA	
218.	Is the storage room of radiation source as per the license condition?	NA	
219.	Are all persons working in the facility have radiation safety training?	NA	
220.	Is the operator handling devices using radioactive materials qualified and possess the necessary certificate?	NA	
221.	Is the periodical radiation monitoring carried out?	NA	
222.	Are the records of inventory of radioactive material maintained in the standard format and submitted to the competent authority as per the period specified?	NA	
223.	Are emergency handling tools available?	NA	

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224.	Are the personnel monitoring badges (TLD, Pocket dosimeter etc.) assigned and worn by each radiation worker?	NA			
225.	Are the radiation symbol and red light displayed as required?	NA			
		C-20 CHEMICAL HAZARD			
	C-20.1 Transportation of Hazardous Substances				
226.	What potentially hazardous materials are transported to or from the site (including wastes)	Fire hazard materials are transported	Solid waste is also transported as per GPCB consent		
227.	What modes of transport are used?  1) Road, 2) Rail, and 3) Pipelines	Road			
		1)Road			
228.	Does the company employ licensed vehicle of its own / outside sources?	Outside sources			
229.	Are the loading / unloading procedures in place and safety precautions displayed?	No, for IPA unloading	Display unloading procedure for IPA unloading in local language.		
230.	Is there a provision to check the healthiness of road tanker with respect to explosives rules?	Yes			
231.	Are loaded tankers or trucks parked in a specific area on-site?	Yes	-		
232.	Do all truck and tanker drivers carry transport emergency (TREM) card or instruction booklet?	Yes	Shall check it at gate		
233.	Do all truck and tanker drivers get training in handling emergencies during transport?	Yes	Shall ensure their safety certificate at gate		
234.	Are all the tankers marked for proper Hazchem code?	Yes	-		
	2)Rail				
235.	What hazardous materials are transported by rail?	NA			
236.	Does the company have a direct siding on site?	NA			
237.	Are tankers or other wagons used in transportation?	NA			
		3)Pipelines			

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238.	What materials are transported to and from the site by pipelines?	NG in pipeline from outside	
239.	Are the pipelines underground or over ground?	Over ground	
240.	Are corrosion protection measures employed in pipelines?	Yes	-
241.	Whether intermediate booster pumps are used?	NA	
242.	What is the maximum, minimum and average transfer rates?	N.A.	
243.	Are the pipelines extended in the public domain?	NO	
244.	Are the pipelines dedicated for each type of chemicals?	Yes	-
245.	Are the pipelines fitted with safety equipment such as leak detectors, automatic shut-off valves etc.?	No	Provide ROV at outlet at NG receiving station
246.	What is the frequency and method of testing of the pipeline?	No	Ensure UT for NG and IPA pipelines every year and Compare UT readings with nominal and if found reduction>30%, replace lines.
247.	Is there written procedure for tackling leakages in pipeline?	Partly	Ensure SOP in on-site emergency plan.
	C-20.2 Handling of Hazardous Substances		
248.	What are the hazardous substances handled in the factory?	Yes, flammable chemicals used	
249.	Whether quantity of hazardous substances is above the threshold limit specified in the Manufacture, Storage and Handling of Hazardous Substances Rule, 1989? If yes, then required documentation is available as per the rule.	N.A.	
250.	Whether written procedure for handling the hazardous substance is available and operators are trained for handling such substances including actions required in case of leakages and spillages?	No	Shall train operators for IPA handling safety
251.	Are the employees aware of the hazards arising from hazardous substances and safety precautions to be taken during handling of these?	Partly	Trained for IPA safety
	C-20.3 Material Safety Data Sheets (MSDS)		
252.	Are the material safety data sheets available for all the chemicals handled, used and manufactured in the factory?	Yes	-
253.	Whether the latest MSDS are displayed at strategic locations?	N.A.	-
254.	Is it available in local language?	N.A.	-

	C-20.4 Spill Control Measures		
255.	Whether spill control procedure is available?	No	Shall prepare and follow for oil spillage
256.	Whether spill collection pit / sump is available at the workplace?	N.A.	-
257.	Whether methodology for recovery / disposal of collected material has been established?	N.A.	-
	C-20.5 Storage of Hazardous Substances		
258.	Whether storage vessels are identified with the capacity as required under MSIHC, Rules 1989.	No	Only flammable IPA used in 22 KL tank
259.	What are the storage pressure and temperature?	ATM	
260.	Whether vessels are above ground / underground?	Underground	
261.	If any of the tanks storing flammable material, whether electrical equipment and fittings are as per electrical area classification?	Yes	
262.	Is the bunded area takes into account the total quantity of the largest tank?	N.A.	
263.	Whether the bund perimeter takes into consideration of trajectory of leak from tank?	N.A.	
264.	Are the vessels properly bonded and earthed and whether periodically checked and record maintained?	Partly	Ensure double earthing to tank with separate earth pit.
265.	Are the vessels fitted with remotely controlled isolation valves?	N.A.	-
266.	Are vessels provided with emergency vent, relief valve, bursting disc, level indicator, pressure gauge, overflow line?	N.A.	
267.	Where do such vents discharge?	Atm	Ensure cleaning schedule for flame arrestor cleaning
268.	Are the vessels provided with alarms for high level, high temperature and high pressure?	N.A.	
269.	Are standby empty tanks or any other alternate systems provided for emptying / transfer in case of emergencies?	N.A.	
270.	What are the provisions made for firefighting / tackling emergency situations around the storage vessels?	Yes	Ensure proper installation of FE, sand buckets and hydrant point
271.	Has any consequence analysis for loss of containment been carried out?	No	Carry out for IPA
272.	Whether the vessels are tested as per statute?	N.A.	
273.	Whether log sheets are filled up on daily basis for recording the parameters of these vessels?	N.A.	-

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274.	Whether monitors for detection of leakage of flammable / toxic material installed?	No	Provide for IPA/NG leakage
275.	Whether the chemicals stored are as per their compatibility?	N.A.	
	C-20.6 Gas Cylinders		
276.	What are the various gas cylinders used in the plant?	Yes	H2, O2, etc.
277.	Are valid licenses available for storing all these cylinders?	N.A.	-
278.	Are the cylinders stored and segregated as per their compatibility?	Yes	
279.	What are the measures taken for combating any emergency in the cylinder's storage area?	Yes	-
280.	Whether integrity test certificates are obtained from the suppliers of the cylinders?	No	Shall ensure it from supplier for randomly selected cylinders
281.	Are the cylinders chained and secured properly along with the valve caps and proper identification colour code?	Partly	Ensure it
282.	Are the cylinders protected from heat or sun and rain?	Yes	-
283.	Whether monitors for detection of leakage of flammable / toxic gas installed?	N.A.	-
	C-20.7 Labeling and Colour Coding		
284.	Are all the containers, vessels and storage tanks labeled` for its content and capacity?	No	Ensure for IPA ay tank
285.	Whether the pipelines are colour coded as per IS 2379?	Yes	-
286.	Is any plant specific color code followed?	No	
287.	Whether the colour codes are displayed conspicuously in the working areas?	No	-
	C-20.8 Hazardous Waste Management		
288.	Is identification done for various types of hazardous wastes?	Yes, identified in GPCB consent	solid or liquid waste generated in factory has been identified in consent  Liquid: 37 KL/Day Zero discharge  Solid: 11 different category solid waste is identified  Air: Vent gas from 02 stacks
289.	Are these quantities less than those specified by the Hazardous Wastes (Management & Handling) Rules, 1989?	Yes	It is less than those specified in the consent order no: AWH- 102752 valid up to 8/5/2024

290.	What are their disposal modes?	Safe	All waste sludge is disposed to CHWIF OR sold to recyclers as per category.
291.	What are the systems / measures adopted for controlling air / water / land pollution?	Adequate measures are taken to control the Air, Water & land Pollution	<ol> <li>Effluent liquid is reused in gardening after treatment.</li> <li>Domestic liquid effluent is sent to STP.</li> <li>Stacks are monitored Quarterly</li> </ol>
292.	Whether the solid waste like combustibles, plastic, metals etc. segregated?	Yes	
		C-21 FIRE AND EXPLOSION HAZARD	
	C-21.1 Organizational Set-up for Fire Fighting		
293.	What is the total strength of fire station and fire crew?	No fire station and 01 fire crew is available.	
294.	How many fire crews are available in each shift?	No any	Ensure one in each shift
295.	Is there fire squad identified in each shift?	No	Ensure in each shift internally trained squad
296.	Standing fire order is available with latest revision	No	
297.	How is the communication with fire station?	Mobile and internal phones	
298.	Does fire safety inspections carried out?	Not carried out for one year	Ensure it every quarter
299.	Does emergency procedure available for leakage or combustion of flammables?	No	Ensure it in On-site plan
300.	What measures are available to control the fire load in the plant area?	At present no	regular inspections shall be done
301.	Whether technical knowledge and skills of the manager and staff responsible for overall fire safety of the plant is adequate?	Yes	
302.	How many major and minor incidents / fires were there in the factory during the last five years? Give department / plant wise.	No any	
303.	Have all the fires / incidents been investigated and corrective actions taken? Give break-up.	System is there	

Resources:  1. Adequacy of protective clothing (coat, trouser, gloves, boots and helmets):	Yes available	
2. Availability of SCBA for firefighting operations and	N.A.	
3. Adequacy of hose, nozzles, ladders, lighting	Yes	
4. Communication facility at fire station, walkie talkie sets	Mobiles & internal phones	
C-21.2 Built in Safety in Civil Design and Construction		
Whether the two safe means of escape available? Are they in separate directions?	Yes, in opposite directions	
Is emergency exits provided to the building handling flammables?	Yes	-
Whether emergency lights are provided?	Partly	DG set is in auto
Whether fire / smoke detectors are installed in fire prone areas?	125 in number installed in fire prone areas	Activate it at earliest
Whether fire call points are provided in different areas?	Yes	-
Whether Fire hydrants are provided near the buildings?	Yes	-
Is ventilation system in plant handling flammables is adequate to prevent formation of flammable mixtures?	Yes	
Is adequate separation is provided between combustible / flammable materials and other material to restrict the fire growth?	Yes	Ensure IPA dosing pump area free of fire prone material
Access routes for firefighting operations is available for areas having high fire load	Yes	
Whether building changes interferes with fire detection and / or	Yes	-
Whether building changes cause unreasonable fire loading / openings in the fire rated walls?	N.A.	
C-21.3 Built in Safety in Electric Circuits and Equipment		
Are the electrical equipment in areas where flammables mixture is likely to be present of flame-proof type?	Partly	-
Are lightning arrestors are provided to the buildings / structures storing flammable materials?	Yes	
Whether adequate bonding and grounding of electrical equipment / pipelines provided?	Not fully	Do survey for NG/IPA lines and ensure it on all flanges
	<ol> <li>Adequacy of protective clothing (coat, trouser, gloves, boots and helmets);</li> <li>Availability of SCBA for firefighting operations and spare cylinders (at least 2 for each SCBA);</li> <li>Adequacy of hose, nozzles, ladders, lighting equipment and pumps; and</li> <li>Communication facility at fire station, walkie talkie sets during firefighting.</li> <li>C-21.2 Built in Safety in Civil Design and Construction</li> <li>Whether the two safe means of escape available? Are they in separate directions?</li> <li>Is emergency exits provided to the building handling flammables?</li> <li>Whether emergency lights are provided?</li> <li>Whether fire / smoke detectors are installed in fire prone areas?</li> <li>Whether Fire hydrants are provided near the buildings?</li> <li>Is ventilation system in plant handling flammables is adequate to prevent formation of flammable mixtures?</li> <li>Is adequate separation is provided between combustible / flammable materials and other material to restrict the fire growth?</li> <li>Access routes for firefighting operations is available for areas having high fire load</li> <li>Whether building changes interferes with fire detection and / or fire suppression systems?</li> <li>Whether building changes cause unreasonable fire loading / openings in the fire rated walls?</li> <li>C-21.3 Built in Safety in Electric Circuits and Equipment</li> <li>Are the electrical equipment in areas where flammables mixture is likely to be present of flame-proof type?</li> <li>Are lightning arrestors are provided to the buildings / structures storing flammable materials?</li> <li>Whether adequate bonding and grounding of electrical equipment</li> </ol>	1. Adequacy of protective clothing (coat, trouser, gloves, boots and helmets); 2. Availability of SCBA for firefighting operations and spare cylinders (at least 2 for each SCBA); 3. Adequacy of hose, nozzles, ladders, lighting equipment and pumps; and 4. Communication facility at fire station, walkie talkie sets during firefighting.  C-21.2 Built in Safety in Civil Design and Construction  Whether the two safe means of escape available? Are they in separate directions?  Is emergency exits provided to the building handling flammables?  Whether emergency lights are provided?  Whether fire / smoke detectors are installed in fire prone areas?  Whether fire call points are provided in different areas?  Whether Fire hydrants are provided near the buildings?  Is ventilation system in plant handling flammables is adequate to prevent formation of flammable mixtures?  Is adequate separation is provided between combustible / flammable materials and other material to restrict the fire growth?  Access routes for firefighting operations is available for areas having high fire load Whether building changes interferes with fire detection and / or fire suppression systems?  Whether building changes cause unreasonable fire loading / openings in the fire rated walls?  C-21.3 Built in Safety in Electric Circuits and Equipment  Are the electrical equipment in areas where flammables mixture is likely to be present of flame-proof type?  Are lightning arrestors are provided to the buildings / structures storing flammable materials?  Whether adequate bonding and grounding of electrical equipment  Not fully

	C-21.4 Explosive Substances (Explosive Act ,1884 and the		
	Explosive Rules,1983)		TDA:
319.	Whether necessary license / approval taken from concerned statutory bodies?	N.A. as no any explosive A, B, C Class storage	IPA is stored in underground storage
320.	Whether systems for explosion suppression, high speed fire detection with deluge, sprinklers, explosion venting etc. are provided?	N.A.	-
321.	Whether explosion resistant walls or barricades are provided around explosive storage?	N.A.	
322.	Whether explosive substance storage areas are restricted for entry?	Yes	
323.	Whether only trained persons are handling explosive substances?	Yes	
324.	Whether explosive substances are stored and transported in approved containers only?	In pipeline only	
325.	Whether electrical fixtures in areas handling explosives are explosion proof type?	N.A.	
326.	Whether adequate measures are taken to prevent any sources of ignition where explosive substances are handled?	Yes	
	C-21.5 Fire Safety in Handling Flammable and Explosive materials		
327.	Whether emergency procedure is available for control of leakage?	Partly	Ensure it in On-site plan which is to be prepared
328.	Whether emergency measures are displayed locally in case of accidental spillage /leakage?	No	Display necessary boards
329.	Whether facility is provided for safe drainage of combustible or flammable liquids in case of leakages?	Yes	-
330.	Whether highly flammable liquids are stored under inert atmosphere?	N.A.	
331.	Whether flammable storage tanks are provided with flame arrestors?	Yes	Service it regularly
332.	Whether suitable PPEs are provided?	Yes	-
	C-21.6 Fire Detection and Alarm System		
333.	What type of fire detection and alarm system provided?	Yes, MCP are available	
334.	Whether all fire prone areas of the plant are covered with fire detection system?	Yes	
335.	Whether fire detection equipment and smoke alarms in good operating condition?	Not yet	Activate it at earliest.

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336.	Whether the numbers of fire call points are adequate and free from obstruction?	25 in number are installed	-
-	Whether regular inspection / maintenance / testing of fire detection and alarm system carried out and records maintained	Yet to activate	Maintain records of regular inspections
338.	Whether any atmospheric monitoring is carried out for explosive mixture of gases or vapours?	No	Provide HC detectors for NG/IPA leakages
339.	Whether emergency power supplies are provided to fire detection and fire alarm system?	Yes, on UPS	-
340.	Whether smoke detectors are located considering ventilation pattern?	Yes	-
341.	Whether annunciation of fire is local or in the control room or in both places?	Both places	
342.	Whether fire panel is constantly attended?	Yet to start, but will be attended.	-
	C-21. 7 Fire Detection		
343.	What is the passive fire protection measures available? (Barriers, doors, dampers etc.)	NA	
344.	Are the areas requiring fire barriers identified?	NA	
345.	Whether the fire barrier provided is of adequate ratings?	NA	
346.	Whether ventilation ducts in flammable areas have been provided with isolation dampers of suitable fire rating?	NA	
347.	Whether sprinklers / deluge is installed wherever necessary?	N.A.	-
348.	Whether regular inspection / maintenance / testing of fire protection system carried out and records maintained?	N.A.	
	C-21.8 Fixed Fire Extinguishing System		
349.	What are the sources of firewater and whether they are dedicated to the fire extinguishing system?	Bore well water	Dedicated for fire water tank available. Ensure it with auto level
350.	Whether the capacity of dedicated water reservoir is adequate to supply to hydrants for minimum 2 h?	No, it is 250 KL	Ensure it 300 KL as pump capacity is 137 M³/hr
351.	Whether un-interrupted power supply is provided to the firewater pumps?	Yes	DG set is available and diesel pump is also available
352.	Whether the extinguishing medium selected is appropriate to the class of fire (water, gaseous, foam, dry powder)?	Yes	
353.	Whether fire hydrants layout is available?	Yes	-

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354.	Whether additional (over minimum requirement) fire hoses, nozzles area Available?	N.A.	-
355.	Whether the hydrants lines are kept pressurized?	Not observed, only 3.0 Kg/cm² pressure	Ensure jokey pump in auto and ensure pressure at 7.0 $\mathrm{Kg/cm^2}\ 24\ x\ 7$
356.	Whether regular inspection / maintenance / testing of fixed fire extinguishing systems carried out and records maintained?	No, in the last one year	Ensure testing and inspection every quarter
	C-21.9 Portable Fire Extinguishing System		
357.	Whether suitable type and numbers of fire extinguishers provided?	Yes	64 FE are available. CO2 & DCP type is available.
358.	Whether the fire extinguishers are located at conspicuous position and easily accessible? Are they fully charged and tagged?	Yes, but no tag of service	Ensure service every quarter as per IS 2190 with tag.
359.	Whether fire extinguishers periodically inspected, tested, refilled and records maintained?	No, in the last year	Ensure it every quarter
360.	Whether defective / unchecked fire extinguishers present at site?	Partly	-
361.	Whether additional fire extinguishers are available?	Yes	Ensure 10% spares.
	C-21.10 Fire Fighting Equipment and Facilities		
362.	Whether fire tenders (water / foam) are available?	No not required	
363.	Whether the fire-fighting system and equipment approved, tested and maintained as per relevant standard?	Partly	Ensure IS 2190 FOR testing
364.	Whether the SCBA / fire suit provided to firefighting team for immediate action?	N.A.	-
365.	What is system for maintenance/ recharge of SCBA?	N.A.	-
366.	Is proper access available for firefighting equipment?	Partly	Ensure height of bottom of FE from floor at 750 mm as per IS 2190 and keep approach free from any object/material storing.
367.	Whether fire hose cabinets are in good condition, easily visible, and accessible?	Yes	Ensure hydrant point away from IPA storage tank. i.e. outside fencing.
368.	Whether drill tower is available? Are fire personnel carrying out regular fire drill?	No, since last one year	Ensure fire drills every two months
369.	What is the communication facility at fire station? Is it adequate?	Mobile phone is available.	Ensure one fire fighter at fire pump house for 24 x 7

	C-21.11 Fire Drill		
370.	Whether mock fire drills are conducted? What is the frequency of drills?	No	Ensure every two months
371.	Whether fire drills are also performed in night Shift?	No	Shall ensure in night shift also.
372.	Whether feedback of fire drill is documented?	Not seen	Ensure record.
373.	What is the system of mutual-aid scheme?	Yes, in verbal with nearby industries	Shall have it in written
	C-21.12 Fire Fighting Training		
374.	Whether there is a system of providing fire- fighting training to plant personnel?	Yes, but Fire extinguishing training is not given in last year	Ensure it to all once a year
375.	What is the frequency and duration of such training? Whether training records are maintained?	No record and training in last year	Ensure training for at least 2.0 hrs and maintain records
376.	Whether fire squads are identified for different areas for first-aid firefighting and rescue, and suitably trained?	Not yet	Ensure from recognized institute
377.	Are all personnel conversant with the fire prevention and protection measures?	Partly	Train them yearly
378.	Whether the fire staff are sent for refresher /advanced training courses?	No	Shall send them to train from recognized institute
	C-21.13 Static Electricity and Lightning		
379.	Whether all vessels and pipes are provided with suitable bonding and grounding?	No	Shall ensure earthing for HSD tank/emulsion tank and bond all flanges of NG/IPA transfer pipe lines.
380.	Whether arrangement has been made for grounding the tanker containing flammable liquid during loading /unloading?	Yes, crocodile earthing provided	Ensure crocodile earthing with proper wire and earth pit
381.	Whether spark resistant tools are provided?	Yes	
382.	Whether lightning protection is provided and is adequate?	Yes	-
383.	Whether antistatic clothing, hand gloves and footwear are provided?	N.A.	-
	C-21.14 Pressure Relief System (The FA 1948 section 31, The GFR – Rule 61)		
384.	Whether the listing of all 'pressure plants' [as defined under Factories Act] has been done?	Yes, list of all pressure vessel is available and identified	-
		C-22 INDUSTRIAL HYGIENE /	

		OCCUPATIONAL HEALTH	
	C-22.1 Ventilation, Illumination, Noise, Vibration, Heat stress and Non-ionizing Radiations		
	C-22.1.1 Ventilation		
385.	Whether any ventilation study has been carried out?	Not required	-
386.	Whether natural ventilation is adequate or not?	Yes	
387.	Whether dust / fumes / hot air is generated in the process?	Yes, in furnace area	
388.	Is there any exhaust ventilation system in any section of the plant?	No	
389.	Is periodic / preventive maintenance of ventilation system carried out and record is maintained?	Yes	
390.	Does any ventilation system re-circulate the exhausted air in work areas?	No	
391.	Is the work environment assessed and monitored for chemical and physical hazards?	Yes, form-37 maintained quarterly for IPA, TOTAL DUST, Noise in respective area	Shall measure and monitor RSPM in dusty area and maintain records in Form-37.
392.	Whether PPE are provided to workers exposed to dust / fumes and gases?		-
	C-22.1.2 Illumination		
393.	Whether illumination study has been carried out for the assessment of illumination level?	Yes, quarterly	compared it with std parameters as per IS
394.	Is there any system of periodical cleaning and replacing the light fittings / lamps in order to ensure that they give the intended illumination levels?	Yes	
395.	Are the workers subject to periodic optometry tests and records maintained?	Yes, yearly done for all	-
396.	Are emergency lighting available at first aid center?	No	Shall ensure it
	C-22.1.3 Noise (The GFR 102 schedule 23)		
397.	Whether any noise study conducted?	Yes, quarterly	
398.	Are there any machines / processes generating high- noise?	Yes, furnace area	Declare area as high noise area with display

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399.	Whether engineering and administrative controls been implemented to reduce noise exposure below the permissible limits?	Yes	
400.	Is there a system of subjecting all those employees to periodic audiometric test who work in high-level noise areas?	Yes, yearly carried out.	
401.	Whether the workers are made aware of the ill effects of high noise?	Partly	Shall make them aware of NIHL
402.	Whether ear muffs / plugs are provided and used?	Provided	Shall ensure its usage always in high noise area.
	C-22.1.4 Vibration (The GFR 102 schedule 23)		
403.	Are there equipment which contributes excess level of vibrations and whether they are identified?	Yes, blowers, compressors etc.	
404.	Whether any vibration study has been carried out?	Yes	-
405.	Are the measures taken to combat vibration to acceptable levels?	Yes	
406.	What is the frequency for measurements of vibration?	Yearly	-
407.	Are the records of measurements and maintenance of equipment / system maintained?	Yes	-
	C-22.1.5 Heat Stress / Cold stress (Extremes of Temperature)		
408.	Are there sources from equipment increasing the heat load in work places?	Yes, in furnace area	
409.	Whether evaluation of heat stress is carried out?	No	Shall do it.
410.	Whether natural ventilation is adequate to minimize the heat stress in work environment?	Yes	-
411.	Are resources available to deal with very hot or very cold conditions (drinking water, lined gloves, insulated boots)?	Yes, for drinking water	-
412.	Do workers know the symptoms of heat cramps / heatstroke or frost bite / hypothermia?	No	Shall ensure to train workers working in furnace/casting area
413.	Are the personal protective equipment suitable for reducing the effects of heat stress available?	Yes	-
	C-22.1.6 Non-ionizing Radiations		
414.	Does the work involve likely exposure to non- ionizing radiations (ultraviolet, infrared, radiofrequency, microwaves, lasers, etc.)	N.A.	
415.	Whether risk assessment has been done for all work areas involving presence of non-ionising radiations?	N.A.	
416.	Are the work areas displayed with relevant safety signs?	N.A.	-

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417.	Are the employees aware about the hazards of non- ionising radiations?	N.A.	-
418.	Do written procedures exists for working in non-ionising radiations?	N.A.	
419.	Is the work environment monitored periodically for physical hazards and control measures initiated whenever deviation from permissible values is observed	N.A.	
420.	Whether suitable personal protective equipment are provided to workers exposed to non-ionising radiations?	N.A.	
	C-22.2 Work Place Monitoring for Hazardous Chemicals (Sec. 7-A FA 1948 & Rule 12- B of GFR, 1963)		
421.	Whether the dust, fumes, smoke, aerosols and mist are monitored as per statute and records maintained?	Yes, form-37 maintained quarterly for total dust, Sox, Nox, noise, IPA etc	Shall measure and monitor RSPM in dusty area and maintain records in Form-37.
422.	What are the types of detectors used for monitoring concentration of hazardous chemicals?	No	Ensure NG detectors at manifolds in shop and IPA detectors at storage and usage area
423.	Is any alarm system installed for any leakage of hazardous chemicals?	No	-
424.	Are antidotes available for toxic chemicals?	N.A.	
425.	Are control measures initiated whenever deviation from permissible values is observed?	N.A. at present as no detectors	
	C-22.3 First Aid Facilities and Occupational Health Centre (OHC) (The FA Sec45, GFR-Rule 68-U, 68-V, 71)		
426.	Are adequate numbers of first aid boxes provided? Give location details?	Yes, 03 in number at strategic location	Display list of respective first aider with contact number at respective first aid box
427.	Are qualified / trained first aiders available in each shift?	No, 07 internally trained persons are available	Ensure minimum 01 first aider trained from recognized institute in each shift
428.	How many qualified / trained first aiders are available at each plant / department?	No qualified first aiders are available	Train them
429.	first aid in a year?	N.A. as no one at present	-
430.	Whether occupational health center is provided?	N.A. but provided	
431.	Does OHC conform to the provisions of the existing statutes?	N.A.	
432.	Are the Medical Attendants / Doctors available in each shift?	Yes, Doctor visits twice in week	-
433.	What facilities are available for transportation of the injured to	Emergency vehicle	

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434.	Are the names of the trained first aiders displayed?	No	Shall display it at OHC after training is provided.
435.	Are the name of nearest hospitals and its telephone number available in OHC?	Nand Hospital at Halol and Rythem Hospital at Vadodara.	
436.	Does the plant have any special preventive medicine program?	No	
437.	Is ambulance posted in proper place and is it available whenever required?	N.A.	
438.	Are sufficient numbers of anti-dotes available in case of any emergency?	N.A.	
439.	Are fire safety measures provided in first aid centre?	Yes	-
440.	Are emergency lighting arrangements available at first aid center?	No	Shall ensure it
	C-22.4 Periodic Medical Examination (The GFR Rule 68-T, Rule 102)		
441.	Whether the periodical medical examination of employees, required under relevant statute is carried out?	Yearly is done	Form-32/33 are available at OHC
442.	Whether it is ensured that contractor's employee are medically examined during pre-employment as well as during the course of employment?	Yes, during employment it is carried out	Ensure pre medical checkup of all contract employees
443.	During the periodical medical examination of the workers, are they examined as per the hazardous process in which they work?(First schedule of The Factories Act, 1948)	Yes, yearly	-
444.	Are the records of all such examination maintained?	Yes, in fomr-32,33	Maintain form-33 for contract persons
	C-22.5 Personal Protective Equipment and Emergency Equipment		
445.	Whether list of required PPE for each hazardous activity is available?	Yes, PPE matrix is available	
446.	Whether feedback from workers obtained during selection of PPE?	Yes	
447.	Have the workers been trained in proper use of PPE including BA sets?	Yes	-
448.	What is the system of procurement, inspection, issue, maintenance and replacement of PPE?	Yes, if they are damaged	
449.	Whether qualitative and quantitative fit-check for respirators is ensured prior to use?	N.A.	
450.	What are the arrangements for safe custody and storage of PPE?	Lockers are given to store	
451.	Are the contractor's workers provided with the required PPE?	Yes	company provides it

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452.	Do the PPE conform to any standard?	Yes IS	
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453.	Are sufficient eye wash fountains and safety showers available?	N.A. but eye wash available	<del>-</del>
454.	Whether appropriate respiratory protective devices are available in accordance to the hazard potential?		-
455.	Are the staff members trained in the right uses of respiratory protective devices?	N.A.	
	C-22.6 Occupational Diseases		
456.	Whether pre-employment medical check-up data available?	Yes, in form-33 for employees	-
457.	During the medical check-up, is any person found having occupational diseases mentioned in 3 <sup>rd</sup> schedule of The FA 1948?	No not yet	-
458.	Whether the medical practitioner informed the Chief Inspector of Factories about the occurrence of the occupational disease?	Yes, system exists	
		C-23 ACCIDENT / I ANALYSIS (The GFR -	INCIDENT REPORTING, INVESTIGATION AND - Rule103,111)
	C-23.1 Accident Reporting and Database Management		
459.	What is the procedure for accident / incident /dangerous occurrence reporting?	Yes, in form-29	Updated monthly
460.	Whether the accident data for the last five years for reportable and non-reportable accidents are available?	Yes, last two years	-
	C-23.2 Accident Investigation		
461.	Are all the accidents investigated?	Yes	
462.	Whether accident investigation procedure is documented?	Yes	
463.	Whether accident investigation reports are submitted to top management?	Yes, system is there.	
464.	How are the findings from accident investigation reports communicated to workers?	During meetings and interactions	-
	C-23.3 Analysis of Accidents		
465.	L 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Yes, if required	
405.	Whether accident analysis is done as per IS 3786?		
466.	Whether accident analysis is done as per IS 3786?  Whether root causes of accidents are analyzed?	Yes	

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468.	What nature of injuries occurred during the last five years?	No data	Ensure record of first aid injury and classify them yearly
	C-23.4 Implementation of Recommendations		
469.	How does the management ensure implementation of the recommendations to avoid recurrence of accidents and incidents?	Not yet	To be done by discussions and report taking
	C-23.5 Reporting and Investigation of Near miss Incidents		
470.	Are all near-miss incidents reported and investigated?	No system	Introduce system and ensure to motivate them for more near miss reporting
471.	Is there any system of classifying and analyzing the near-miss incidents?	N.A. as no system	
		C-24 EMERGENCY PREPAREDNESS	
	C-24.1 Site Specific Details		
472.	Are the site area maps (including layout, access roads and assembly points) available in control room / emergency control center?	Yes available	Shall display it at strategic locations
	C-24.2 Duties and Responsibilities of Key Personnel		
473.	Is the hierarchy of emergency response personnel right from site emergency controller downward, and alternative officials identified?	No, old ERP of Ryker Base followed	Shall prepare in details as per 33 annexure and identify all SMC, IC, DIC, Key personal, Essential workers with their designation, residence address and contact number in on-site plan.
474.	Are the duties and responsibilities assigned to the designated officials during emergency, both during and outside normal working hours clearly identified and understood by them?	No	Shall ensure it in new on-site plan
	C-24.3 Identification of Emergencies and Accident Scenario		
475.	Are the possible accident scenarios leading to emergency identified and known to the operating personnel?	No	Share similar NG/IPA explosion & fire scenarios and its prevention to operator level
476.	Are approved emergency preparedness plans (on- site and off-site) in place?	Partly	Shall prepare it as per annexure-33.
	C-24.4 Declaration and Termination of Emergency		
477.	Is the list of designated officials who are to be communicated about declaration and termination of emergency available in the control room / emergency control center?	No	Shall identify and display in control room/CCR

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478.	Are the methods of communication (siren, public address system etc.) for declaration and termination of an emergency known to all the workers?	No	Shall display emergency code at switch & at prominent places and test code every week at fix time and day
	C-24.5 Resources-evacuation / Transport		
479.	Are the following resources (equipment, personnel and procedures) required to handle emergency available?  1. Communications, 2. Public announcement systems 3. Monitoring of hazardous releases into the environment, 4. Emergency shelters at the facility, 5. Emergency exits with proper illumination, with uninterrupted power supply, 6. Direction for emergency exit / escape route marked in haulage /Alleyways, 7. Transport for evacuation of plant personnel, 8. Medical care including administration of antidotes, and 9. Security / maintenance of law and order.	Yes N.A. No Yes. Yes Yes Yes Yes Yes Yes	
	C-24.6 Communication Facilities	755	
480.	Does the emergency control center have direct communication links with the fire station and the plant control room?	No, only by mobile network and internal phones	
481.	Are there adequate alarm points from which an emergency alarm can be raised?	Yes	-
482.	Is there infrastructure available for ensuring backup electric power supply for communication links where required	Yes, UPS power supply is available for internal phones	-
	C-24.7 Medical Care		
483.	Is the procedure for emergency medical care available?	Yes, in OHC	
484.	Whether the system has been tested at regular frequency through mock drill / exercises for its adequacy?	Yes	
485.	Does the system of periodic replacement of antidotes and medicines required in emergency exist?	N.A.	
	C-24.8 Updation of Emergency Plan		
486.	Is the emergency plan updated based on the feedback from the periodic drills / exercises?	Not yet	Shall update plan also on basis of lacuna found in mock drills also.

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487.	Are the contact details of all concerned officials kept updated in the emergency plan?	No	Shall update plan accordingly
	C-24.9 Periodic Drills / Exercises		
488.	Are mock-exercises conducted at stipulated intervals?	Not since last one year	Shall positively carry out every six months
489.	Are the scenarios varied in the mock-exercises to ensure that all possible factors including meteorological conditions, affected plant personnel covered?	No	Shall change scenarios for mock drill like HSD fire, electric fire, NG/IPA fire, fall accident from height, burn incidence etc.
490.	Whether emergency preparedness Plans have been tested and reviewed at regular frequency through mock drill for its adequacy	No	Update after preparation according to mock drill findings
	C-24.10 Training of Plant Personnel		
491.	Are the plant personnel trained in handling emergency equipment?	Yes	
	C-24.11 Public Awareness Program		
492.	Are public awareness programs conducted for the people around the site regarding the actions to be taken in case of off-site emergency?	N.A. as no any toxic gas release in premises	
	C-24.12 Mutual-aid Program		
493.	Are the types of accidents where external organizations would be involved in remedial actions identified? Are their responsibilities defined?	Yes, in verbal with nearby industries	-
494.	Is the plant responsible for rendering mutual aid assistance to any other external organizations? Does this assistance effect the plant's emergency Preparedness?	No	
495.	Whether the communication channels for mutual assistance identified and known with and between two organizations?	Yes	-
	C-24.13 Emergency Control Centre		
496.	Is the emergency control center located beyond the effective distances of identified emergency scenarios?	Yes	
497.	If the emergency control center is located within the effect distance, is it suitably protected that it will be available in case of emergency?	N.A.	
		C-25 SAFETY INSPECTION	
	C-25.1 Inspection Program		

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498.	Are checklists available for inspections? For example, availability of checklists like:  a) Handling, Storage and Transportation of hazardous chemicals; b) Electrical hazards;	No. No	Shall prepare all checklists and carry out inspections every month. Check list should include safety aspects like PPE usage, HK, MSDS awareness, environ monitoring, safety displays, earthing to equipment, couple guards, forklift checks, bonding/earthing of flammable pipelines and equipment etc
	c) Fire safety; d) Hand and portable power tools; e) Machine hazards; f) Lifting equipment; g) Ladders and scaffolding; h) Environmental Monitoring; j) Civil structure; k) Housekeeping; m) Emergency equipment; and n) Gas cylinder and other pressure vessels used /available in the organization.	No No No Yes No Yes Yes Yes	
	C-25.2 Safety Related Deficiency (SRD) Report		
499.	Are SRDs generated based on the area wise checklists?	No	Shall inspect and generate
500.	What is the procedure for resolving the SRDs?	Investigation and implementation	
501.	Whether the procedure exists for notification and root cause analysis of non-conformities and action taken on them?  C-25.3 Safety Inspection Records	No	Shall ensure procedures
502.	Are the safety inspection records maintained?	Not observed	Shall maintain after inspection
	C-25.4 Methodology and Inspection Team		<u> </u>
503.	Is there written procedure for safety inspection?	No	Shall prepare it.
504.	Whether safety inspection is carried out by a designated team?	N.A. as no inspection	Shall form team from safety, production, engg and do inspections every month
505.	What is the frequency of safety inspections?	No frequency found	Shall do it every month
506.	Whether an inspection report is generated?	N.A.	
		C-25.5 Compliance of Recommendations	
507.	To whom the recommendations are submitted	N.A. as no reports	Shall carry out and submit up to MD.

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508.	Are recommendations of safety inspections complied in time?	N.A. as no reports	
509.	Is compliance of recommendations sent to top management?	N.A. as no reports	Send it up to MD level
510.	Is compliance of recommendations reviewed by safety committee?	N.A. as no reports	
511.	Does top management follows-up the compliance?	N.A. as no reports	

## Display of information required as per electrical rule

(a)	On Rear side doors of (HT & LT) incomer panels - Paint the details of source (Power coming from Panel no. XYZ) and which terminals remain live.	
(b)	On the front door of incomer panels – Where from the feeder is coming (source of power)	
(c)	Transformer tag numbers- On the gates of tr yard and also on the transformer	
(d)	Earthing pits - Earth pit numbers	
(e)	Motor foundation- Motor tag numbers	
(f)	Passage leading to lift machine room- Arrow showing direction & the text (lift M/c room)	
(g)	Lift door - Passenger cum goods lift.	
(h)	On the wall opposite to the s/s entrance- Three important intercom numbers -MSS, Control room & Security	
(i)	On the 11 KV interconnection bus ducts (in MSS)- Details of bus/panel numbers interconnected (Text will be painted on vertical face)	
(j)	On the cable chamber doors of HT panels- Feeder details &. Feeder number.	
(k)	On front doors of lighting DBs- Source of power (panel number & feeder number	

	Annex-2
	Interconnection of earthing networks – To do or not to do
1.0	IS 2309:1989
	12.3.3 Common Network for all services
	A common earth termination network is recommended for the lightning protective system and all other services. It should be in accordance with the recommendations of this code and should also comply with any regulations applicable to the services concerned. The resistance to earth should, in this case, be the lowest value required for any of the individual services. (see IS 3043:1987)
2.0	NFPA 780
	3.13 Ground Terminals.
	Each down conductor shall terminate at a ground terminal dedicated to the lightning protection system. The design, size, depth, and number of ground terminals used shall comply with 3.13.1 through 3.13.4.
	Electrical system and telecommunication grounding electrodes shall not be used in lieu of lightning ground electrodes. This provision shall not prohibit the required bonding together of grounding electrodes of different systems.
	The down conductor(s) shall be attached permanently to the grounding electrode system by bolting, brazing, welding, or high-compression connectors listed for the purpose, and clamps shall be suitable for direct burial.
	EIL (New Delhi) Standard Specifications for Earthing installation –
3.0	Philippopulation shall be an extended for the conference of the co
1	Lighting protection shall be provided for the equipments, structures as shown in layout drawing The independent earthing network shall be provided for lightning protection and shall be bonded at least at two points with the main earthing network.

Table-1 Size of Earthing as per good engineering practice - Size of earthing GI wire / GI strip

Equipment	Minimum size of earthing
Motors up to 3.7 KW	GI wireNo.8
Motors 37 KW and above	10mm dia GI wire rope.
Small equipments, lighting boards, Instruments, buttons stations, Receptacles	16mm dia GI wire rope.
Push buttons stations, receptacles	Do
Lighting / Power / Inst. Panels more than 600mm wide. Street lighting poles, pipe racks, heat exchanger, vessels	GI wireNo.8
Buildings, columns, storage silos, Loading racks, main earth bus, transformers, switchgear panels	10 mm dia GI wire rope
Loading racks, main earth bus, transformers, switchgear panels	GI strip 40 X 6 mm
Cable trenches & trays	Two parallel earth strips will run along the length

Table-2 Size of Earthing as per Good Engineering Practice - Size of earthing copper wire / strip

Equipment	Minimum size of earthing		
Motors upto 5.5 KW -	13 SWG bare (solid) copper wire		
5.5 KW up to 10 KW	11 SWGdo		
11 to 15 KW -	9 SWGdo		
16 to 30 KW	6 SWGdo		
31 to 50 KW	25 X 3 mm copper strip		
51 KW and above	25 X 4 mm copper strip		

	Annex-3				
Key indicators for the results of DGA					
C2 H2 > 20 ppm	Power discharge, Arc				
H2 > 100 ppm	Partial discharge, Arc				
CO or CO2 > 10000 ppm	Cellulose degradation, Thermal fault in paper				
C2 H2/ C2 H6 > 1 ppm	Discharge				
H2/C2H4 >10 ppm	Partial discharge, thermal fault in oil				
CO2/CO > 10 ppm	Cellulose overheating				
CO2/CO < 3 ppm	Cellulose degradation by Elec. fault				
C2 H2 / H2 >2 ppm with	Fault gases diffusing from OLTC				
C2H2 >30 ppm	into main tank				

The IEEE method determines the probable nature of a fault according to the dominant gases.

Gases (in %)	Corona in oil	Arcing in oil	Overheated cellulose	Overheated oil			
Hydrogen	86	60	6.7	2			
Carbon Monoxide	0.2	<0.01	92	< 0.01			
Methane	1.3	5	1.2	16			
Ethane	0.5	1.6	< 0.01	17			
Ethylene	0.2	3.3	< 0.01	63			
Acetylene	0.1	30	< 0.01	2			
The most commonly measured gases are:  O2 (Oxygen)  N2 (Nitrogen)  H2 (Hydrogen)  C0 (Carbon Monoxide)  C02 (Carbon Dioxide)  CH4 (Methane)  C2H6 (Ethane)  C2H4 (Ethylene) and  C2H2 (Acetylene)							

### I. S. CODES ON EHS

SP: 53	Safety code for the use, Care and protection of hand operated tools.				
IS: 818	Code of practice for safety & health requirements in electric and gas Welding and cutting operations.				
IS:1179	Eye & Face precautions during welding, equipment etc.				
IS: 1860	Safety requirements for use, care and protection of abrasive grinding Wheels.				
IS: 1989 (part	-II) Leather safety boots and shoes				
IS: 2925	Industrial safety Helmets				
IS: 3016	Code of practice for fire safety precautions in welding & cutting operation.				
IS: 3043	Code of practice for earthing				
IS: 3764	Code of safety for excavation work				
IS: 3786	Methods for computation of frequency and severity rates for industrial injuries and classification of industrial accidents				
IS: 3996	Safety code of scaffolds and ladders				
IS: 4082	Recommendations on stacking and storage of construction materials and components at site				
IS: 4770	Rubber gloves for electrical purposes				
IS: 5121	Safety code for pilling and other deep foundations.				
IS: 5216(Part-	I) Recommendations on Safety procedures and practices in electrical works				
IS: 5557	Industrial and Safety Rubber Lined boots				
IS: 5983	Eye protectors				
IS: 6519	Selection, care and repair of "Safety footwear				
IS: 6994 (part-	-I) Industrial Safety Gloves' (Leather & Cotton Gloves)				
IS: 7293	Safety Code for working with construction Machinery				
IS: 7293	Safety Code for working with construction Machinery				
IS: 8519	Guide for selection of industrial safety equipment for body protection				
IS: 9167	Ear protectors				
IS: 11006	Flash back arrestor (Flame arrestor)				
IS: 11016	General and safety requirements for machine tools and their operation				
IS: 11057	Specification for Industrial safety nets				
IS: 11226	Leather safety footwear having direct. moulded rubber sole				
IS: 11972	Code of practice for safety precaution to be taken when entering & sewerage system				
IS: 13367	Code of practice-safe use of cranes				
IS: 13416	Recommendations for preventive measures against hazards at working place				

#### **INTERNATIONAL STANDARDS ON EHS**

Safety Glasses : ANSI Z 87.1, ANSI ZZ' 87.1, AS 1337, BS 2092,

BS 1542, BS 679, DIN 4646/ 58211

Safety Shoes : ANSI Z 4101, AS2210, EN 345

Hand Gloves : BS 1651

Ear Muffs : BS 6344, ANSIS 31.9

Hard Hat : ANSI Z 89.1/89.2, AS 1808, BS 5240, DIN 4840

Goggles : ANSI Z 87.1

Face Shield : ANSI Z 89.1

Breathing Apparatus : BS 4667, NIOSH

Welding & Cutting : ANSI Z 49.1

Safe handling of compressed: P-1 (Compressed Gas Association 1235 Jefferson Davis Highway,

Gases in cylinders Arlington VA 22202 – USA)s

#### **References:**

• The Factories Act, 1948, the Gujarat Factories Rules, 1963.

Code of Practice on Occupational Safety and Health Audit, IS-14489:2018.
 Safety Audits-Guide for the Chemical Industry of ICMA.





## BEIL INFRASTRUCTURE LIMITED [14983]

Manifest No: 2542430 24/05/2024

Copy 1

To be forwarded by To be forwarded by the occupier to the State Pollution Control Board or Committee.

	Committee.							
		Sender's Details						
Sender Name	Birla Copper Asoj Pvt.Ltd. [52688]							
Address	Nr. Kemrock, Baroda-Halol Highway, Ta:Waghodia, Di: Vadodara,- Taluka :VAG Distict:VAD Pin no:391510							
Contact Details	8866844672 lawrance.gonsalves@adityabirla.com	GPS Coordinates		Lat :22.458391272216094 Long :73.39618				
Guardian Detail	,,,							
		eceiver's Details	W					
State	Gujarat	Type of Facility	Pre- pro	cossing				
Facility Details	BEIL INFRASTRUCTURE LIMITED [14983]	Type of Facility	Pre- pro	cessing				
Contact Details	8238040998 dalwadibd@beil.co.in							
			Long:73	Long:73.04892407902906				
Address	9401-9412,9501-9506,7905 E to H, GID	C,Ankleshwar, Taluka :A	NK Distict:	NK Pin no:39300	2			
		<b>Waste Details</b>	بالمراث					
Waste Details	I~5~5.2~Wastes or residues containing	oil						
Waste Intended 1	or Preprocessing	Total Qty	24.22	OMT Consi	istency liquid			
	Tr	ansporter Details		n E la lie lie				
Name	KHARA TRANSPORT	Contact Details	9374166	497 kharatranspo	ort@gmail.com			
Address	Dhsarth green, Dhsarth District :Vadodara	Taluka :Vadodara						
		Vehicle Details			1981 - 1 To 18			
Vehicle no	GJ06VV6686 (IMEI No :358980100567982)		Yes	Type of Vehicle	e Tanker			
Driver name	RANJIT	Driver Contact No		7759860016				
	Waste '	Transportation Deta	ile					
Vehicle Depart.				О	Loose Waste 24,220			
	Use PPE's while unloading. Emulsion waste f			No of bags	0			
Sender's Declaration:  (1) The above contents of hazardous/ other wastes consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper conditions for its transport from aforementioned location to common facility or captive facility or actual user by way of road/ transportation in accordance with the applicable central as well as state government regulations.  (2) I have obtained membership of common facilities/ carried out agreement with actual user for disposal/ actual use of hazardous waste having authorization under Rule 9.  (3) I do hereby verify that no part of manifest is false and nothing has been concealed. If any information sprouts to be false or concealed, I will be held responsible for the consequences under HOWM Rules, 2016 and amendments thereof.  Name and stamp of sender:  Date:  Date:  Signature:  Signature:  Signature:  Receiver's Certification of Receipt of Hazardous waste  I, hereby declare that the said waste is received at the facility/unit for which I have valid CCA (under Rule-9 in case of recycling) for its disposal/ utilization. I also declare this information to be true failing which I will be held responsible for the consequences under HOWM Rules, 2016 and amendments thereof. I hereby, accept/ reject the manifest.								
Stamp:	,	Date:	aiiii Coti	Sions	ature:			





28<sup>TH</sup> December 2023

To, IRO MoEF&CC, Ministry of Environment, Forest and Climate Change,, Integrated Regional Office, Gandhi Nagar A wing- 407 & 409,, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar-382010, Gandhinagar, Gujarat

Sub: Advertisement of Environmental Clearance for setting up of manufacturing plant of "Metallurgical Industries" at Plot No. 187/P & 187/P/1/B/2, 187/P & 187/P/1/B/3, 187/P & 187/P/1/B/4, 187/P & 187/P/1/B/5 & 187/P & 187/P/1/B/6 Waghodia GIDC, Taluka: Waghodia, District: Vadodara, Gujarat

Dear Sir,

With reference to above subject we would like to inform you that Hindalco Industries Limited has received the Environmental Clearance for setting up of manufacturing plant of "Metallurgical Industries" at Plot No. 187/P & 187/P/1/B/2, 187/P & 187/P/1/B/3, 187/P & 187/P/1/B/4, 187/P & 187/P/1/B/5 & 187/P/1/B/6 Waghodia GIDC, Taluka: Waghodia, District: Vadodara, Gujarat from SEIAA Gujarat vide Environmental Clearance No. : SEIAA/GUJ/EC/3(a)/1613/2023 Dated 13<sup>th</sup> Dec 2023.

The advertisement for the same has been given in English Newspaper "Indian Express" and Gujarati News paper "Divya Bhaskar on 17<sup>th</sup> December 2023. Copy of the Advertisement is attached herewith for your ready reference.

Thanking You,

Yours Faithfully

**Authorized Signatory** 





28<sup>TH</sup> December 2023

To, Vadodara Municipal Corporation, Khanderao Market Building, Raimahal Road, Vadodara - 390209

Sub: Advertisement of Environmental Clearance for setting up of manufacturing plant of "Metallurgical Industries" at Plot No. 187/P & 187/P/1/B/2, 187/P & 187/P/1/B/3, 187/P & 187/P/1/B/4, 187/P & 187/P/1/B/5 & 187/P & 187/P/1/B/6 Waghodia GIDC, Taluka: Waghodia, District: Vadodara, Gujarat

Dear Sir,

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Yours Faithfully

**Authorized Signatory** 



28<sup>™</sup> December 2023

To, The District Collector, District Collector Office, Kothi Building, Raopura Mandvi, Vadodara, Guiarat - 390001

Sub: Advertisement of Environmental Clearance for setting up of manufacturing plant of "Metallurgical Industries" at Plot No. 187/P & 187/P/1/B/2, 187/P & 187/P/1/B/3, 187/P & 187/P/1/B/4, 187/P & 187/P/1/B/5 & 187/P & 187/P/1/B/6 Waghodia GIDC, Taluka: Waghodia, District: Vadodara, Gujarat

Dear Sir,

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The advertisement for the same has been given in English Newspaper "Indian Express" and Guiarati News paper "Divya Bhaskar on 17th December 2023. Copy of the Advertisement is attached herewith for your ready reference.

Thanking You,

Yours Faithfully

**Authorized Signatory** 



21st December 2023

To, Vadodara Municipal Corporation, Khanderao Market Building, Raimahal Road, Vadodara - 390209

Sub: Advertisement for Environmental Clearance of M/S. Birla Copper Asoj Pvt Ltd for setting up of manufacturing plant of metallurgical Industries at survey no. 21, village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat, India 391510.

Dear Sir,

With reference to above subject we would like to inform you that we M/S. Birla Copper Asoj Pvt Ltd has received Environmental Clearance for setting up of manufacturing plant of metallurgical Industries at survey no. 21, village Asoj, Vadodara-Halol Highway, Taluka Waghodia, Vadodara, Gujarat, India 391510 from SEIAA Gujarat vide Environmental Clearance No.: SEIAA/GUJ/EC/3(a)/1609/2023 Dated: 13<sup>th</sup> Dec 2023.

The advertisement for the same has been given in English Newspaper "Indian Express" and Gujarati Newspaper "Divya Bhaskar on 17th December 2023. Copy of the Advertisement is attached herewith for your ready reference.

Thanking You,

Yours Faithfully

Signatory

turla Copper Asoj Private Limited (Formerly known as Ryker Base Private Limited)



21st December 2023

To, The District Collector, District Collector Office, Kothi Building, Raopura Mandvi, Vadodara, Gujarat – 390001

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Thanking You,

Yours Faithfully

Authorized Signatory



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નો પ્રયોગ પાલિકાએ નો તરફથી બાબતની આવશે. પણ માટે ડતી ધુળ ખ્ટ થવાથી નમ પ્રકલ્પો કરી છે. 23 કરેલા 27 विध निर्देश આપવામાં

अधने नाम

જિલ્લા ખને જુના સામાનની ાત દિવ્ય ાલ જે કાલ ા અધિકારી

HOL SOA!

F //४३, •थु डलीबर જાતાને આ નોટીસ लिक हिडली लिया ो ४ ४वसचा वधा અને તેમાં અમારો स, परंतु त्यारणांट ક્ષેખીમાં ગાફી માંગેલ 11-01-2022 4 જાતાએ નોંઘ લેવી. ખા અમારી મારહતે.

યોહાણ 2 એક્વોકેટ

-651M 🐞. જેની વિગતો નીચે

**नेसमेक्सार** 

WI-23-1 BVC-23-1 NZM-22-1

WI-23-1 ૦૦ કલાકે. શરૂઆતનો

IS-BVC-22-1 B-HSR-22-1 IOTS-22-1

S-BVC-22-2 ા ના ૧૨,૦૦ કલાકે.

TS-GKP-23-1 TS-CDG-23-1 18-ASR-23-2 ય સમયગાળી ૩૦ મિનિટ

મુવાકાત લો. vitter.com/WesternRly

કાર્યપાલક કજૂનેરથી, નર્મદા શોજના નફેર વિભાગ ને. ૧૦, વંડોદરા ફસ્તકના કામ. (A.H.A.A.A.A)

डेकर नीहीस नं १८ सने १०१३-१४

Las but Sla

૧- મેઇન્ટ્રેન્સ એક પ એક્સેસટીંગ ગાર્ડન એક એસ.એસ.એન.એલ ગેસ્ટ કાઉસ ઇલીસ પાર્ક એટ વડીદરા ક્રીર વન ઇથર - ર૦૨૨-૨૩ - NEIDU 48H 31 40.3 & BUN.

એનલાઈન બીડ સબપીશન કરવાની છેલ્લી તારીખ: 

वध् माहिती मारे संवधित वेबसार्थर इच्छे: https://tender.nprocure.com, (માહિતી-વડો-૧૧૪૪-૨૩-૨૪)

ર્યા.એમ.એ.એમ.સી./392/2023

અરપ્રદાર તરફે એક્વોફેટ (વકીલની) વૈસર્ગ કે.ધ્વાસ તથા અતુલ પે.વ્યાસ અરપ્રદારઃ-દાણી પ્રલક મમુસ્લાઇ રહે; ૪, કિશન ડ્રાંવેસ, મધર્સ સ્કુલ, ગોત્રી, વડોદરા-૩૯૦૦૨૧ 

મેળવવા અરુ૧ કરેતી છે અને અરુ૧૮૧૨ રેચન દાણી અયુરકામાં મનુભાઇના પૈકી નામાના આદારે રીધી લીટીના વારસદાર ફોવાનું ૧૯માવી વારસાઇ સર્ટીફીકર મેળવવા અરુ૧ કરેલ છે. વારતે; આ જાહેરાત આપવામાં આવે છે કે; ઉપરોક્ત દશવિલ જેચમ મિલકત હસ્ક અને ઉપરા હસ્કદાર માટે અરુ૧૯૧૨ એક માત્ર વારસદાર છે તેમ છવાં કોઇને આ અંગે જેની વક્સર હોય તે તમોએ આ

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(भेभ, भे. शेयट) स्रोतंत्र सम्बद्धाः

બિરલા કોપર આસોજ પ્ર

ગામઃ આસોજ, વડોદરા-હાલોલ હાઇવે, તાલુકા વાઘોડિયા, વડોદરા. ગજરાત પર 'મેટલર્જિકલ ઇન્ડસ્ટ્રીઝ'ના મેન્યુકેક્ચરિંગ પ્લાન્ટ

SEIAA गुજरात हारा सर्वे नं, 21, गामः आसीष, વડોદરા-હાલોલ હાઈવે. તાલકા વાઘોડિયા, વડોદરા, ગુજરાત પર 'મેટલર્જિકલ ઇન્કસ્ટ્રીમ'ના મેન્યુફેક્યરિંગ प्लान्टनी स्थापना माटे पर्यावरशीय मंधूरीनी स्थना.

લાગતા વળગતા સર્વેને અને તમામ જનતાને આ નોટિસથી જણાવવામાં આવે છે કે બિરલા કોપર આસોજ ગ્રા. લિ. ના મેટાલજિંકલ ઇન્ડસ્ટ્રીઝના ઉત્પાદન પ્લાન્ટની સ્થાપના માટે પર્યાવરણીય પરવાનગી, SEIAA તરફથી ૧૩મી ડિસેમ્બર, ૨૦૨૩ ના પરવાનગી પત્ર નંબર SEIAA/GUJ/EC/3(a)/૧૬૦૯/૨૦૨૩ ફારા આપવામાં આવી છે. આ પરવાનગી પત્રની નકલ સંસ્થાની નોંઘણી કચેરીમાં અને સ્ટેટ લેવલ એન્વાયરમેન્ટ ઇમ્પેક્ટ એસેસમેન્ટ ઓથોરીટી(SEIAA), ગુજરાત ની કચેરીમાં ઉપલબ્ધ છે તેમજ Pariveshell વેબસાઈટ https://parivesh.nic.in/ અને GPCB ની વેબસાઈટ http://seiaa.gujarat.gov.in / પર પણ જોઇ શકાય છે.

# हिन्हाङो छन्डस्ट्रीअ सि

વાઘોડિયા જીઆઈડીસી ખાતે મેટલર્જિકલ ઇન્ડસ્ટ્રીઝ, તાલુકાઃ વાઘોડિયા, જિલ્લોઃ વડોદરા, રાજ્ય ગુજરાત

SEIAA गुजरात बारा प्लोट नं. १८७/P अने १८७/P/1/B/2. १८७/P अने 100/P/1/B/3, 100/P 31d 100/P/1/B/8, 100/P 41d 100/P/1/B/4 અને ૧૮૭/P અને ૧૮૭/P/૧/B/૬, વાલોડિયા જીઆઇડીસી, તાલુકો: વાલોડિયા, જિલ્લોઃ વડોદરા, ગુજરાત પર 'મેટલર્જિકલ ઇન્કસ્ટ્રીમ'ના મેન્યુપેક્સરિંગ પ્લાન્ટની સ્થાપના માટે પર્યાવરણીય મંજુરીની સૂચના.

લાગતા વળગતા સર્વેને અને તમામ જનતાને આ નોટિસથી જણાવવામાં આવે છે કે. હિન્દાલ્કો ઇન્ડસ્ટ્રીઝ લિમિટેડ મેટાલર્જિકલ ઇન્ડસ્ટ્રીઝના ઉત્પાદન પ્લાન્ટની સ્થાપના માટે પૂર્યાવરણીય પરવાનગી, SEIAA તરફથી ૧૩મી ડિસેમ્બર, ૨૦૨૩ ના પરવાનગી પત્ર નંબર SEIAA/GUJ/EC/3(a)/૧૬૧૩/૨૦૨૩ કારા આપવામાં આવી છે. આ પરવાનગી પત્રની નકલ સંસ્થાની નોંઘણી કચેરીમાં અને સ્ટેટ લેવલ એન્વાયરમેન્ટ ઇમ્પેક્ટ એસેસમેન્ટ ઓથોરીટી(SEIAA), ગુજરાત ની કુચેરીમાં ઉપલબ્ધ છે તેમજ Parivesh ની વેબસાઈટ https://parivesh.nic.in/ GPCB ની વેબસાઈટ http://seiaa.gujarat.gov.in/ પર પણ જોઈ શકાય છે.

# **Birla Copper Asoj Private Limited**

Metallurgical Industries at Village: Asoj, Vadodara-Halol highway, Taluka Waghodia, Vadodara, Gujarat

NOTICE OF ENVIRONMENTAL CLEARANCE BY SEIAA,
GUJARAT FOR SETTING UP OF MANUFACTURING PLANT
OF 'METALLURGICAL INDUSTRIES' AT SURVEY NO. 21,
VILLAGE: ASOJ, VADODARA-HALOL HIGHWAY,
TALUKA WAGHODIA, VADODARA, GUJARAT.

Notice is hereby given, to all concerned & public at large, that for setting up of manufacturing plant of Metallurgical Industries of M/s. Birla Copper Asoj Pvt. Ltd. been accorded Environmental Clearance from State Level Environment Impact Assessment Authority, Gujarat vide its letter of clearance no. SEIAA/GUJ/EC/3 (a)/1609/2023 dated 13th December, 2023. The copy of the said clearance letter is available at the registered office of the Organization & at the office of State Level Environment Impact Assessment Authority (SEIAA), Gujarat and may also be seen at website of the Parivesh at https://parivesh.nic.in/ and in GPCB at http://seiaa.gujarat.gov.in/.

# **Hindalco Industries Limited**

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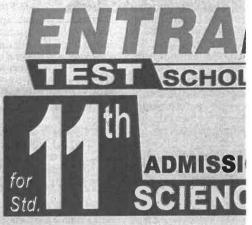
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Instr 2.Th of N Metallurgical Industries at Waghodia GIDC, Taluka: Waghodia, District: Vadodara, State Gujarat

NOTICE OF ENVIRONMENTAL CLEARANCE BY SEIAA, GUJARAT FOR SETTING UP OF MANUFACTURING PLANT OF METALLURGICAL INDUSTRIES' AT PLOT NO. 187/P & 187/P/1/B/2, 187/P & 187/P/1/B/3, 187/P & 187/P/1/B/4, 187/P & 187/P/1/B/5 & 187/P/1/B/6WAGHODIA GIDC, TALUKA: WAGHODIA, DISTRICT: VADODARA, GUJARAT

Notice is hereby given, to all concerned & public at large, that for setting up of manufacturing plant of Metallurgical Industries of M/s. Hindalco Industries Ltd. been accorded Environmental Clearance from State Level Environment Impact Assessment Authority, Gujarat vide its letter of clearance no. SEIAA/ GUJ/EC/3 (a)/1613/2023 dated 13th December, 2023. The copy of the said clearance letter is available at the registered office of the Organization & at the office of State Level Environment Impact Assessment Authority (SEIAA), Gujarat and may also be seen at website of the Parivesh at http://parivesh.nic.in/ and in GPCB at http://seiaa.gujarat.gov.in/.



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