Hindalco Industries Limited Unit: Birla Copper, Dahej

Status of compliance to conditions of Environmental Clearance No. J- 11011/85/2002-IA II (I) dated 10th Feb-2004

(Six monthly compliance report from October-23 to March-2024)

Sub.: Expansion of Copper Smelter and setting up of Zinc smelter plant by M/s Hindalco Industries Limited at Village Lakhigam and Dahej, Tehsil Vagra, District Bharuch in Gujarat- Environmental Clearance reg.

Expansion proposal is for increasing capacity of copper smelter plant from 1.50 lakh TPA to 2.50 lakh TPA. and setting up of Zinc Smelter Plant of 1.0 lakh TPA.

(A) SPECIFIC CONDITIONS:

| Sr.No. | Details of condition | Compliance status | |
|---|--|---|--|
| 01 | All the conditions stipulated by the Ministry while according to | There are seven specific condition and thirteen general conditions stipulated | |
| | environmental clearance to the existing project vide its letter no. | in environmental clearance issued by the Ministry Vide Letter No. J- | |
| | J-11011/81/2000-IA. II(I) dated 8th January 2002 should be strictly | 11011/81/2000-IA. II (I) dated 8th January 2002 the total conditions have been | |
| | implemented. | complied with. The compliance report is attached as Annexure- (B) | |
| 02 | As reflected in the EIA/EMP effluent generation should not | The effluent generation is 110 m3 /hr. The Capacity of ETP is increased from | |
| | exceed 153 m3/hr. Capacity of the existing ETP should be further 160 m3/hr. to 320 m3/hr. The Company has maintained zero liquid 6 | | |
| augmented from 160m3/hr to 200m3/hr. company should make discharge except RO reject and storm water in rainy se | | discharge except RO reject and storm water in rainy season which is | |
| | efforts to achieve zero discharge, till such time, company should | discharged into deep sea through HDPE pipeline at a point through multiple | |
| | utilize the treated effluent to the maximum extent possible for | diffuser system as suggested by NIO. The total treated water is recycled in the | |
| green belt development. However, additional treated efflu | | process and effluent quality is maintained as per prescribed standard including | |
| | during the rainy season, effluent could be discharged into the | bioassay test as per the GPCB. The Monitoring report is submitted regularly. | |
| | deep sea through HDPE pipeline at a point through multiple | The monitoring reports are submitted to the Ministry regularly. | |
| | diffuser system as recommended by the NIO. The treated effluent | | |
| | should conform to the standards including Bioassay test as per the GPCB. The | The condition is complied with. | |
| | monitoring report should be submitted to the Ministry regularly. | · | |
| 03 | Fugitive emission of dust/acid mist vapors, fumes and SO2 should | All possible measures are adopted to mitigate the fugitive emission, SO2, | |
| | be controlled, and work environment monitored for prevailing | fumes in the work environment. The prevailing contaminants are monitored | |
| | contaminants regularly. Fugitive dust emission in the zinc | regularly. Adequate capacity of bag filters is attached to all transfer points to | |
| | concentrates handling area and at various transfer points should | mitigate the fugitive emission. As such there is no emission of HC from our | |
| | be minimized. The company should install bag filter in the calcine | process & operation. However, SO2 emission is being monitored periodically, | |
| | grinding, melting, and casting sections of zinc smelter plant for | and data are maintained. | |
| | recovery of dust & should be recycled in the process. | | |

SO2 containing off-gases from smelting, setting and converting furnaces in copper and zinc smelter plants should be cleaned and converted to Sulphuric acid by Double Conversion Double Absorption (DCDA) Process technology for maximum conversion of SO2 to H2SO4. Industry should meet SO2 emission limit of 2kg/ton of H2SO4 produced and emission limit of 50mg/Nm3 of acid mist. Company should install fluoride scrubbing system for phosphoric acid plant so that fluoride concentration should conform to the prescribed standards of 25mg/Nm3.

SO2 containing off-gas from smelting, converting furnace is cleaned and converted into sulfuric acid by double conversion and double absorption process technology at scrubber. The company has complied the SO2 emission as well as acid mist. The Observation is well within the prescribed standard. The company has installed fluoride scrubbing system for phosphoric acid plant. The concentration of fluoride observed is well within the limit.

Zinc Smelter plant was not commissioned.

Au smelt plant & SAP-II plant has been dismantled in 2017 & 2019 respectively.

CPP-II and CCR-II plants has been dismantled in 2021.

Phosphoric acid plant and Di ammonium phosphate plant is being dismantled in Year 2024.

The observed values of parameters monitored are well within limits, Hence condition is complied with

| Sta | ck analysis report Oct-23 to March-2024 | SO2 | 2 | NOx | | Р | М |
|----------|--|------------|-----------|------------|-----------|------------|-----------|
| Sr No | Stack list at Birla Copper | GPCB Norms | Observed | GPCB Norms | Observed | GPCB Norms | Observed |
| | | | Value | | Value | | value |
| 1 | Dore furnace of PMR plant | 100 ppm | 71.46 | 50 ppm | 29.13 | 150 mg/Nm3 | 77.06 |
| 2 | Sulphuric acid Preheater I | 100 ppm | 75.91 | 50 ppm | 29.2 | 150 mg/Nm3 | 90.50 |
| 3 | CPP-I (CFBC Boiler) 35 MW | 600 mg/Nm3 | 372.26 | 600 mg/Nm3 | 197.7 | 100 mg/Nm3 | 82.47 |
| 4 | Shaft furnace of CC Rod plant I | 100 ppm | ND | 50 ppm | ND | 150 mg/Nm3 | 86.13 |
| 5 | Shaft furnace of CC Rod plant-II | - | Plant s/d | | NA | - | Plant s/d |
| 6 | Sulphuric acid Pre-heater-III | 100 ppm | 62.97 | 50 ppm | 27.62 | 150 mg/Nm3 | 78.49 |
| 7 | CPP-II (CFBC Boiler) 15.35 MW | 600 mg/Nm3 | Plant s/d | 600 mg/Nm3 | Plant s/d | 150 mg/Nm3 | Plant s/d |
| 8 | CPP-III (CFBC Boiler) 60 MW | 600 mg/Nm3 | 388.26 | 300 mg/Nm3 | 183.27 | 50 mg/Nm3 | 31.06 |
| 9 | Shaft furnace of CC Rod plant-III | 100 ppm | ND | 50 ppm | ND | 150 mg/Nm3 | 80.68 |
| 10 | Anode Casting of Smelter-I | 40 mg/Nm3 | ND | 25 mg/Nm3 | ND | 150 mg/Nm3 | 91.54 |
| 11 | Main stack Sec. Gas Scrubber of Smelter-I | 40 mg/Nm3 | 30.48 | NA | NA | NA | NA |

04

| 12 | Main stack Slag Cleaning Furnace of Smelter-I | 40 mg/Nm3 | 30.48 | NA | NA | 150 mg/Nm3 | 84.74 |
|------|--|----------------------------|--------------------|-------------------------|----------------|--------------------|------------------|
| 13 | Main Stack Sulphuric Acid plant - I | 2.0 kg/T of 100 % H2SO4 | 1.07 Kg/T | Acid Mist 25 mg/Nm3 | ND | NA | NA |
| 14 | Cathode Stripping m/c of Ref-I | 40 mg/Nm3 | ND | NA | NA | NA | NA |
| 15 | Anode scrap Washing m/c of Ref-I | 40 mg/Nm3 | ND | NA | NA | NA | NA |
| 16 | Liberator stack of Refinery-I | 40 mg/Nm3 | ND | Acid Mist 25 mg/Nm3 | ND | NA | NA |
| 17 | Slag granulation of Smelter-I | 40 mg/Nm3 | ND | NA | NA | 150 mg/Nm3 | 79.38 |
| 18 | Steam Dryer of Copper Conc. of SmI | 40 mg/Nm3 | ND | NA | NA | 150 mg/Nm3 | 83.74 |
| 19 | Centralized Scrubbing System SmIII | 40 mg/Nm3 | 29.66 | NA | NA | 150 mg/Nm3 | 83.21 |
| 20 | Sulphuric Acid plant – III (TGS Scrubber) | 1.0 kg/T of 100 % H2SO4 | 0.21 Kg/T | Acid Mist 25 mg/Nm3 | ND | NA | NA |
| 21 | Cathode Stripping m/c - Ref-III | 40 mg/Nm3 | ND | NA | NA | NA | NA |
| 22 | Liberator stack of Refinery-III | 40 mg/Nm3 | Nil | Acid Mist 25 mg/Nm3 | NA | NA | NA |
| 23 | PMR Phase -III | 40 mg/Nm3 | 28.69 | 25 mg/Nm3 | 17.71 | 150 mg/Nm3 | 82.13 |
| DAP | / PAP Fertilizer | F Norms | F | NH3 Norms | NH3 | PM Norms | PM |
| DAP | | 6.0 mg/Nm3 | Plant s/d | 175 mg/Nm3 | Plant s/d | 150 mg/Nm3 | Plant s/d |
| Reac | tor (Phosphoric Acid plant) | 6.0 mg/Nm3 | Plant s/d | NA | NA | NA | NA |
| 05 | The industry should develop a dedi | cated new secured | landfill Zinc Sm | elter plant was not cor | mmissioned her | nce not relevant f | or zinc smelter. |

The industry should develop a dedicated new secured landfill facility for jarosite from the zinc smelter plant as per the CPCB guidelines besides the land fill facility already developed for disposal of solid waste from copper smelter plant. Authorization under the hazardous wastes (Management & Handling) rules 2000, from the GPCB should be obtained. Ground water quality in the vicinity of the landfill should be regularly monitored and report submitted to the CPCB/GPCB/Ministry once in six months. Green belt of adequate width and density in 25 ha. Of project

Zinc Smelter plant was not commissioned hence not relevant for zinc smelter. However, secured land fill facility is already developed as per CPCB guidelines for disposal of waste from copper smelting plant. The required Authorization under the hazardous wastes (Management & Handling) rules 2000, from the GPCB is obtained. The Ground water quality is monitored and report of the same is submitted to GPCB and Ministry periodically. The condition is complied with

Green belt of adequate width and density in 25 ha. Of project area in addition to the 62 ha. Of area already afforested should be provided to mitigate the effects of fugitive emission all around

The project is developed within the existing copper complex area where green belt is developed in 133.93 Ha. The project area is already taken care of to mitigate the effect of fugitive emission all around the plant. The development

06

| | the plant. The addition land required for green belt development should be procured and progress made in this regard should be reported to this Ministry within three months The development of green belt along the periphery of plant and township should be anomy based as per CPCB guidelines. | of green belt along the boundary as well as the in open space available in the plant area is done; the plantation is also done all along the road as per the CPCB guidelines. The condition is complied with |
|----|--|---|
| 07 | The solid hazardous waste/sludge generated from the process should be disposed off in a landfill. The landfill should be constructed at a safe height from Gr water. The design of the landfill should be approved by SPCB as per Hazardous Wastes (M&H) Rules 06-01-2003. | The solid hazardous waste/sludge generated from the process is disposed in a secured landfill. The secured landfill is constructed as per CPCB guideline which is approved by GPCB. The safe height from Gr water, designed of the land fill is approved by GPCB as per Hazardous Wastes (M&H) Rules 06-01-2003. The condition is complied with |

(B) GENERAL CONDITIONS:

| 01 | The project authorities must strictly adhere to the stipulations made by | The company is fully committed to adhere to the stipulated conditions | |
|----|---|--|--|
| | the Gujarat State Pollution Control Board. | made by the GPCB. | |
| | | The condition is complied with | |
| 02 | No further expansion or modifications in the plant should be carried out | The company has obtained prior environment clearance before | |
| | without prior approval of the Ministry of Environment & Forests. In case | expansion or modification in the plant. In case of any deviations or | |
| | of deviations or alterations in the project proposal from those submitted | alterations in the project proposal, the company has approached to the | |
| | to this Ministry for clearance, a fresh reference should be made to the | Ministry and accordingly, Ministry has accessed the adequacy of | |
| | ministry to assess the adequacy of conditions imposed and to add | conditions imposed for environment protection measures. | |
| | additional environmental protection measures required, if any. | The condition is complied with | |
| 03 | The project authorities must strictly comply with the rules under | The company has already obtained the permission from Chief | |
| | Manufacture, Storage and import of hazardous chemicals Rules, 1989 as | Inspectorate of Factories, Chief Controller of Explosives, Fire safety | |
| | amended in October 1994 and January 2000. Prior approvals from Chief | Inspectorate for Manufacture, storage and import of hazardous | |
| | Inspectorate of Factories, Chief Controller of Explosives, Fire Safety | chemicals rules, 1989 as amended in October 1994 and January 2000. | |
| | Inspectorate etc. must be obtained. | The permission obtained from Factories Inspectorate is attached as | |
| | | Annexure-V. The Rules and regulations under Manufacture, storage and | |

| | | | | import of hazardous chem necessary permission is att already obtained necessary necessary permission is attach Boiler inspectorate permission The condition is complied with | ached licens ned as n is at | l as Annexure-V. es from Controlle s Annexure-VI | The co | mpany has |
|----|----------------------------|---|-----------------|---|--|---|--|---|
| 04 | hazard 1989 | tauthorities must strictly comply with the rules with regard to wastes in accordance with the hazardous Wastes (M & H) Rules mended in Oct-94 and in Jan, 00. Authorization from the SPCB otained. | | The company has strictly com handling and disposal of Haza Hazardous wastes (manageme in January 1994 and in Januar authorization for collections/t waste. Under the Hazardous \(2003 \) vide CCA No. AWH-1082 \(02-03-2026. The company has condition is complied with | plied rdous ent ar y; 200 reatm Waste | s wastes in accordand Handling) Rules, 00. The company han nent/storage/disposs (Management and ted 30-05-2020 wh | nce with 1989 as s alread sal of had d Handl nich is va | n the s amended y obtained azardous ing) Rules, alid up to |
| 05 | within includ genera | verall noise levels in and around the plant area should be kep the standard (85 dBA) by providing noise control mea ing acoustic hoods, silencers, enclosures etc. on all sources of ation. The ambient noise levels should conform to the sta ibed under EPA rules 1989. | asures noise | The overall noise levels in and ar 61.0 dB(A) in nighttime which is and 70 dB(A) in nighttime) The al Noise Measurement (Oct-23 to Ma 24) Location Near Township opp. to Arogya Near 16 ha opp. to Smelter-III Near YMA Hostel Near Jetty Platform | well well well | within the standards | (75 dB(/ed are as | A) in daytime under: |
| M | onitore | d ambient noise levels(dB) from Oct-23 to March-2024 (Average) | | | | | | |
| S | Sr No. | Location | | Day time Noise Level in dB(A) | | Nighttime Noise Level in dB(| A) | |
| 1 | | Near Smelter-I | | 65.2 | | 62.5 | | |
| 2 | | Near SAP-I | | 63.8 | | 62.5 | | |
| 3 | | Near ETP Plant | | 62.6 | 61.0 | | | |
| 4 | | Near Captive Power Plant-I | | 66.8 | | 64.2 | | |
| 5 | | Near DAP | | 63.4 | - | 61.8 | | |
| 6 | | Near Smelter-III | | 65.5 | | 63.3 | | |

| 7 | Near Guest house in T/ship | | 60.3 | | 59.0 | | |
|----|--|-------------------|---|-----------------------|------------------------|------------------------------|--|
| 8 | Near Central Park in T/ship | | 60.1 | | 58.6 | | |
| 9 | Near YMA Hostel | | 60.7 | | 59.3 | | |
| 10 | Near Gypsum yard (boundary wall) | | 62.5 | | 61.0 | | |
| 11 | Near Coal yard | | 62.8 | | 61.0 | | |
| 12 | Near Jetty Platform | | 65.1 | | 63.2 | | |
| 06 | | | | mination is car | ried out of the worker | rs on regular basis | |
| | | and the records | s are maintaine | ed as per the factory | act. The copy of | | |
| | | records is attach | ned Annexure-I. | The medical examina | tion is carried out | | |
| | health center should be strengthened and the medical records o | f each | regularly, hence | condition is com | nplied with. | | |
| | employee should be maintained separately. | | | | | | |
| 07 | The project proponent should have a scheme for social upliftment | in the | | | undertake the activ | • | |
| | surrounding villages with reference to contribution. | | socioeconomic status of surrounding villages like community | | | | |
| | | | development programmes, educational programmes, drinking water | | | | |
| | | | supply and health care etc. The public hearing of this project was | | | | |
| | | | exempted by MoEF, New Delhi the company has well defined CSR policy, | | | | |
| | | | the activities conducted in surrounding villages and beneficiaries are as | | | | |
| | | | under: Hence condition is complied with. | | | | |
| | | | Activities Undertaken | No. of Activitie | es Beneficiaries | No. of Villages Benefited | |
| | | | Education | 7 | 849 | 2 | |
| | | | Health | 141 | 28810 | 16 | |
| | | | Sustainable livelihood | 207 | 5475 | 21 | |
| | | | Social | 2 | 10042 | 15 | |
| | | | Others | 4 | 331 | 9 | |
| | | | Total | 361 | 45507 | 63 | |
| 08 | The project proponent shall also comply with all the environry | | | | veral measures to prot | | |
| | protection measures and safeguards recommended in the EIA ar | id risk | · · · · · · · · · · · · · · · · · · · | | | | |
| | analysis report. | | | | measure taken is attac | hed as Annexure- | |
| | | | II. The condition | is complied with | า. | | |

A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the Environmental Management and monitoring functions.

A separate Environmental Management Cell equipped with full-fledged laboratory facilities is set up to carry out the Environmental Management and monitoring functions:

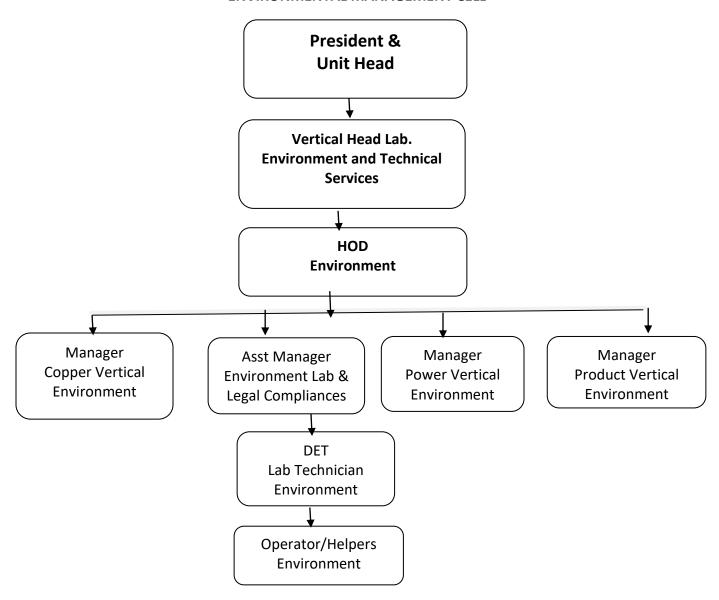
List of equipment and consumable available in the laboratory facilities is as under:

| CAAQMS (04) | OCEMS (35) |
|-------------------------------|---------------------------------|
| Atomic Absorption | Weather station |
| Spectrophotometer | |
| PM2.5, PM10 Combo | Stack Monitoring Kit (1) |
| Noise Level monitors (02) | Handheld SO2, NH3, HF analyzer |
| Multi gas Analyzer (SO2, NOx, | Ion selected Fluoride analyzers |
| CO2, HC, O2, and CO) | |
| Spectrophotometer (visible | BOD incubator |
| range) | |
| COD reflux set up | Single pan balance |
| Relevant chemicals as per IS | Hot Air Oven |
| 5182 | |
| Stopwatch | Thermometer |
| PH Meter | Titration set |
| | 1 |

The condition is complied with.

ENVIRONMENTAL MANAGEMENT CELL as under

ENVIRONMENTAL MANAGEMENT CELL



The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the MoEF as well as the State Government

The funds so provided should not be diverted for any other purpose.

The company has incurred an amount of Rs. 301.37 crores to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government. The funds earmarked were used for environmental protection measures and not diverted for any other purposes.

The Pollution control equipment's are installed and working efficiently, adequate measures are taken. The details of amount incurred are as under:

Capital Cost for Environmental Control Measures

| S. No. | Item | Total (Lacs) |
|----------|---|----------------------|
| 1 | Dryer bag filer & de dusting system | 669 |
| 2 | Alkali Scrubber Smelter-1 | 8500 |
| 3 | Water Cool hood Smelter-1 Converter 1,2 &3 | 1770 |
| 4 | Ventilation hood from S & C furnace & bag house | 150 |
| 5 | ESP's of smelter-III | 518 |
| 6 | ESP's of CPP | 400 |
| 7 | Alkali Scrubber of Smelter –III | 694 |
| 8 | Effluent Treatment –II | 1000 |
| 9 | Sewage Treatment Plant-II | 100 |
| 10 | Sulfuric Acid Plant –III | 8595 |
| 11 | Tail Gas Scrubber SAP-III | 3466.69 |
| 12 | SLF for ETP waste | 700 |
| 13 | PG, slag & Fly ash yard- for Phase-III | 2000 |
| 14 | Bag filters for CHP CPP-III and ash management | 800.38 |
| 15 | Liberator scrubber | 141 |
| 16 | PMR plant Bag filter | 50 |
| 17 | Fluorine scrubbing system in PAP-III | 203.08 |
| 18 | Scrubbing system for DAP-III plant | 300 |
| 19 | Green belt development | 600 |
| 20 | Tertiary Water Recycling Unit | 6754 |
| 21 | Wind fencing for coal yard | 1395 |
| <u> </u> | Total | 38806(388.06 crores) |

| 11 | A six-monthly compliance status report should be submitted to monitoring agencies. | The six-monthly compliance status reports are submitted regularly. The copy of acknowledgement is attached as under: The environmental monitoring report is sent regularly to government agencies. Hence condition is complied. |
|----|---|---|
| 12 | The project proponent should inform the public that the project has been accorded environmental clearance by the Ministry. This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region and a copy of the same should be forwarded to the regional office. | The company has published the information regarding obtaining the environment clearance for the aforesaid project in two daily newspapers i.e. Times of India dtd.21.02.2004 and Gujarat Samachar dtd.20.02.2004. A copy of the above letter and a copy of each advertisement was submitted to MoEF, New Delhi vide letter No. IGCL/TIC/01 dated 24.02.2004. The condition is complied with |
| 13 | The project Authorities should inform the Regional Office as well as the ministry, the date of financial closure, approval and the date of commencing land development work, if any. | The company has informed the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and commencing the land development work. The condition is complied with. |

| Sr No | Description | Status | | |
|-------|---|--|--|--|
| 1 | The project authorities must strictly adhere to the stipulations | The company is fully committed to adhere to the stipulated conditions made | | |
| | made by the Gujarat State Pollution Control Board. | by the GPCB. The condition is complied with | | |
| 2 | No further expansion or modifications in the plant should be | The company has obtained prior environment clearance before expansion or | | |
| | carried out without prior approval of the Ministry of Environment | modification in the plant. No deviations or alterations in the project | | |
| | & Forests. In case of deviations or alterations in the project | proposal is carried out. | | |
| | proposal from those submitted to this Ministry for clearance, a | | | |
| | fresh reference should be made to the Ministry to assess the | | | |
| | adequacy of conditions imposed and to add additional | | | |
| | environmental protection measures required, if any. | | | |
| 3 | The project authorities must strictly comply with the rules and | The company has already obtained the permission from Chief Inspectorate | | |
| | regulations under Manufacture, Storage and Import of Hazardous | of Factories, Chief Controller of Explosives, Fire safety Inspectorate for | | |
| | Chemicals Rules, 1989 as amended in October 1994 and January | Manufacture, storage and import of hazardous chemicals rules, 1989 as | | |
| | 2000. Prior approvals from Chief Inspectorate of Factories, Chief | amended in October 1994 and January 2000. The permission obtained from | | |
| | Controller of Explosives, Fire Safety Inspectorate etc. must be | Factories Inspectorate is attached as Annexure-V | | |
| | obtained. Rules and regulations under Manufacture, storage and | The Rules and regulations under Manufacture, storage and import of | | |
| | import of hazardous chemicals rules, 1989 as amended in October | hazardous chemicals rules, 1989 is complied with. The necessary permission is attached as Annexure-V | | |
| | 1994 and 2000 are being complied by us. Necessary licenses from Controller of Explosives, Boiler inspectorate and Factories | The company has already obtained necessary licenses from Controller of | | |
| | Inspectorate have been obtained as per requirement. | Explosives, the necessary permission is attached as Annexure-VI | | |
| | inspectorate have been obtained as per requirement. | Boiler inspectorate permission is attached as Annexure-VII | | |
| | | The condition is complied with | | |
| 4 | The project authorities must strictly comply with the rules and | The company has already obtained authorization under the Hazardous | | |
| | regulations with regard to handling and disposal of hazardous | Wastes (Management and Handling) Rules, 2003. | | |
| | wastes in accordance with the Hazardous Wastes (Management | CCA No. AWH-108216 dated 30-05-2020 which is valid up to 02-03-2026. | | |
| | and Handling) Rules, 2003. Authorization from the State Pollution | The condition is complied with. | | |
| | Control Board must be obtained for collections/ treatment/ | · I | | |
| | storage/disposal of hazardous wastes. | | | |
| 5 | The overall noise levels in and around the plant area should be | The overall noise levels in and around the plant area is 63.20 dB(A) in | | |
| | kept well within the standards (85 dBA) by providing noise control | daytime and 61.40 dB(A) in nighttime which is well within the standard. | | |
| | measures including acoustic hoods, silencers, enclosures etc. on all | 75 dB(A) in daytime and 70 dB(A) in nighttime. The ambient noise | | |
| | sources of noise generation. The ambient noise levels should | level measured are as under: | | |
| | conform to the standards prescribed under EPA Rules, 1989 viz. 75 | | | |
| | dBA (daytime) and 70 dBA (nighttime) | The condition is complied with | | |

| | | Day time | Nighttime |
|---|---|---|--|
| Sr No. | Location | Noise Level in dB(A) | Noise Level in dB(A) |
| - | Near Smelter-I | 65.2 | 62.5 |
| 1 | Near SAP-I | 63.8 | 62.5 |
| } | Near ETP Plant | 62.6 | 61.0 |
| | Near Captive Power Plant-1 | 66.8 | 64.2 |
|) | Near DAP | 63.4 | 61.8 |
| <u>;</u> | Near Smelter-III | 65.5 | 63.3 |
| , | Near Guest house in T/ship | 60.3 | 59.0 |
| 3 | Near Central Park in T/ship | 60.1 | 58.6 |
|) | Near YMA Hostel | 60.7 | 59.3 |
| .0 | Near Gypsum yard (boundary wall) | 62.5 | 61.0 |
| .1 | Near Coal yard | 62.8 | 61.0 |
| .2 | Near Jetty Platform | 65.1 | 63.2 |
| u fo fa aı | Occupational health surveillance programmes should indertaken as regular exercise for all the employees, specifically those engaged in handling hazardous substances. The first acilities in the occupational health center should be strengther and the medical records of each employee should be maintain eparately. | examination on regular basis an factory act. The copy of records and The condition is complied with. | ance of the workers is carried out by med the records are maintained as per the is attached Annexure-I |
| 7. The project proponent should have a scheme for social up liftment in the surrounding villages with reference to contribution in road construction, education of Children, festivals, health centers, sanitation facilities, drinking water supply, community awareness and employment to local people whenever and wherever possible both for technical and non-technical jobs | | socioeconomic status of surrou ers, programmes, educational prog ess care etc. The activities conduct | to undertake the activities to uplift unding villages like community develop grammes, drinking water supply and h ted in surrounding villages and benefic |

| | Activities Undertaken | No. of Activitie | S | Beneficiaries | No. of Villages Benefited | |
|----|--|--------------------------------|-------------------|---|---|--|
| | Education | 7 | | 849 | 2 | |
| | Health | 141 | | 28810 | 16 | |
| | Sustainable livelihood | 207 | | 5475 | 21 | |
| | Social | 2 | | 10042 | 15 | |
| | Others | 4 | | 331 | 9 | |
| | Total | 361 | | 45507 | 63 | |
| 8 | The project proponent shall also comply with protection measures and safeguards recommends analysis report. | mended in the EIA and safeguar | | ne company has taken several environmental protection measures and ifeguards recommended in the EIA and risk analysis report. The majors ken and risk analysis is attached as Annexure-II | | |
| 9 | A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the Environmental Management and monitoring functions. | | | A separate Environmental Management Cell equipped with full-fledged laboratory facilities is set up to carry out the environmental Management and monitoring functions. A full-fledged separate Environmental Laboratory is set up and equipped with all necessary instruments/ equipment's. The following equipment and consumable are available in the laboratory: | | |
| | | | | //S (04) : Absorption ophotometer | OCEMS (35) Weather station | |
| | | | PM2.5, | PM10 Combo | Stack Monitoring Kit (1) | |
| | | | Noise L | evel monitors (02) | Handheld SO2, NH3, HF analyzer | |
| | | | _ | as Analyzer (SO2, NOx, C, O2, and CO) | Ion selected Fluoride analyzers | |
| | | | Spectro range) | ophotometer (visible | BOD incubator | |
| | | | COD re | flux set up | Single pan balance | |
| | | | Relevai 5182 | nt chemicals as per IS | Hot Air Oven | |
| | | | Stopwa | atch | Thermometer | |
| | | | PH Met | ter | Titration set | |
| | | | The cond | dition is complied with | | |
| 10 | The project authorities shall earmark an a cores (as mentioned in question no. xix | | | • • | nt of Rs. 301.37 crores to implement the of Environment & Forests as well as the | |

implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose. The funds already were used for environmental protection measures during the plant expansion and not diverted for any other purposes.

State Government. The details of amount incurred is as under:

The funds earmarked were used for environmental protection measures and not diverted for any other purposes. The condition is complied with

| for any other | purposes. | | | | | | |
|---------------|---|---------------|--|--|--|--|--|
| | Hindalco Industries Ltd. | | | | | | |
| | Unit: Birla Copper, Dahej | | | | | | |
| | Capital Cost for Environmental Control Measures | | | | | | |
| Sr no | Item | Total in lacs | | | | | |
| 1 | Dryer bag filer & dedusting system | 669 | | | | | |
| 2 | Alkali Scrubber Smelter-1 | 8500 | | | | | |
| 3 | Water Cool hood Smelter-1 Converter 1,2 &3 | 1770 | | | | | |
| 4 | Ventilation hood from S & C furnace & bag house | 150 | | | | | |
| 5 | ESP's of smelter-III | 518 | | | | | |
| 6 | ESP's of CPP | 400 | | | | | |
| 7 | Alkali Scrubber of Smelter –III | 694 | | | | | |
| 8 | Effluent Treatment –II | 1000 | | | | | |
| 9 | Sewage Treatment Plant-II | 100 | | | | | |
| 10 | Sulfuric Acid Plant –III | 8595 | | | | | |
| 11 | Tail Gas Scrubber SAP-III | 3466.69 | | | | | |
| 12 | Tail Gas Scrubber SAP-I | 5093.56 | | | | | |
| 13 | SLF for ETP waste | 700 | | | | | |
| 14 | PG, slag & Flyash yard- for Phase-III | 2000 | | | | | |
| 15 | Bag filters for CHP CPP-III and ash management | 800.38 | | | | | |
| 16 | Liberator scrubber | 141 | | | | | |
| 17 | PMR plant Bag filter | 50 | | | | | |
| 18 | Fluorine scrubbing system in PAP-III | 203.08 | | | | | |
| 19 | Scrubbing system for DAP-III plant | 300 | | | | | |
| 20 | Green belt development | 600 | | | | | |
| 21 | Zero Liquid Discharge | 6754 | | | | | |

| | 22 | Wind fencing for coal yard | 1395 | |
|----|--|--|---|--|
| | | Total in Lacs | 43899.71 | |
| | | Total in crore | 438.9971 | |
| 11 | be monitored Control Board | ntation of the project vis-à-vis environmental action plans will by Ministry's regional office at Bhopal / State Pollution d / Central Pollution Control Board. A six-monthly compliance should be submitted to monitoring agencies. | The implementation of the project is monitored by Ministry's regional office at Bhopal / State Pollution Control Board / Central Pollution Control Board. The six-monthly compliance status reports are submitted regularly. The copy of acknowledgement is attached as under: The condition is complied with | |
| 12 | The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/Committee and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Officer. | | The company has published the information regarding obtaining the environment clearance for the aforesaid project in two daily news papers i.e. Gujarat Samachar dtd.2.4.2005 and The Times of India dtd.2.4.2005. The condition is complied with | |

