



File No.: J-11015/84/2018-IA.II(NCM)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 29/11/2025



To,

Shri Debanshu Chatterjee
M/s HINDUSTAN ZINC LTD RAJPURA DARIBA MINE
Hindustan Zinc Limited, Rajpura Dariba Mine Tehsil - Railmagra, District - Rajsamand, Rajasthan,
Relmagra, RAJSAMAND, RAJASTHAN, Dariba, 313211
ram.murari@vedanta.co.in

Subject: Amendment in EC of Rajpura Dariba Underground Mine with production capacity of Lead-Zinc Ore from 1.08 to 2.0 MTPA (Total Excavation 2.48 MTPA) & Lead-Zinc Ore Beneficiation from 1.2 to 2.5 MTPA in the Mine lease area of 1142.2106ha (ML No. 166/2008) by M/s Hindustan Zinc located at Tehsil Relmagra, District Rajsamand, Rajasthan - Amendment in Environmental Clearance – regarding

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/RJ/MIN/535799/2025 dated 27/09/2018 for grant of an amendment in prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC25A0105RJ5833495A
(ii) File No.	J-11015/84/2018-IA.II(NCM)
(iii) Clearance Type	Amendment in EC
(iv) Category	A
(v) Schedule No./ Project Activity	1(a) Mining of minerals
(vi) Sector	Non-Coal Mining
(vii) Name of Project	Amendment in Environment Clearance of Rajpura Dariba Underground Mine issued from MoEF & CC, New Delhi vide letter no. J-11015/84/2018-IA.II (M), date 13.04.2020 for Lead-Zinc Ore Underground Mine & Lead Zinc Ore Beneficiation (M.L. Area -1142.2106 ha. & M.L No. 166/2008), Located at Tehsil Relmagra, District- Rajsamand, Rajasthan by M/s Hindustan Zinc Limited.

(viii) Location of Project (District, State)	RAJSAMAND, RAJASTHAN
(ix) Issuing Authority	MoEF&CC
(x) EC Date	09/05/2025
(xi) Applicability of General Conditions	NO
(xii) Status of implementation of the project	

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A, B and C)/ EIA & EMP Reports were submitted to the MoEF&CC for an appraisal by the Expert Appraisal Committee EAC under the provision of EIA notification 2006 and its subsequent amendments.
4. The above-mentioned proposal has been considered by Expert Appraisal Committee EAC in the 50th EAC meeting held during 12th and 15th September 2025. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.
5. The EAC, in its 50th EAC meeting held during 12th and 15th September 2025, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal under EIA Notification 2006 (as amended) for the grant of Amendment in Environmental Clearance dated 13.04.2020 for Rajpura Dariba Lead-Zinc Underground Mine (M.L. No. 166/2008 & Area- 1142.2106 Ha) with Production Capacity of 2.0 million TPA (Total Excavation 2.48 million TPA) & Lead Zinc Ore Beneficiation of 2.5 million TPA by M/s Hindustan Zinc located at Tehsil Relmagra, District Rajsamand, Rajasthanong with following additional specific conditions, in addition to standard conditions applicable to Non-Coal mining projects given at Annexure (1) .The details of amendments are annexed to this letter as Annexure (2). The details of the project along with observation and recommendation of the EAC as per approved minutes is given at Annexure (3).
6. The MoEF&CC has examined the proposal in accordance with the extant provisions of the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the Expert Appraisal Committee hereby accords amendment in Environmental Clearance dated 13.04.2020 for Rajpura Dariba Lead-Zinc Underground Mine (M.L. No. 166/2008 & Area- 1142.2106 Ha) with Production Capacity of 2.0 million TPA (Total Excavation 2.48 million TPA) & Lead Zinc Ore Beneficiation of 2.5 million TPA by M/s Hindustan Zinc located at Tehsil Relmagra, District Rajsamand, Rajasthan under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of specific and standard EC conditions given at Annexure (1)
7. This issues with the approval of the Competent Authority.

Copy To

1. **The Secretary**, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi-110 001.
2. **The Secretary**, Department of Mines & Geology, Government of Rajasthan, Secretariat, Jaipur.
3. **The Secretary**, Department of Environment, Government of Rajasthan, Secretariat, Jaipur.
4. **The Secretary**, Department of Forests, Government of Rajasthan, Secretariat, Jaipur.
5. **The Chief Wildlife Warden**, Government of Rajasthan, Jaipur.
6. **The Deputy Director General of Forests (C)**, Ministry of Env., Forest and Climate Change, Regional Office, Jaipur, A-209 & 218, Aranya Bhawan, Mahatma Gandhi Road, Jhalana Institutional Area, Jaipur – 304002, Rajasthan.

7. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110 032.
8. **The Member Secretary**, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110 011.
9. **The Chairman**, Rajasthan State Pollution Control Board, 4, Jhalana Institutional Area Jhalana Doongri, Jaipur- 302 004, Rajasthan.
10. **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
11. **The Director General & CIM**, Directorate General of Mines Safety Hiraapur, Dhanbad, Jharkhand, 826001
12. **The District Collector, Rajasamand District**, Government of Rajasthan.
13. **Guard File.**
14. **PARIVESH Portal.**

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Conditions

S. No	EC Conditions
1.1	PP is allowed to switchover from wet tailing disposal to dry tailing disposal facility within the lease area to a height of 70 meters of stacking.
1.2	The Project Proponent needs to install the permanent water sprinklers in addition to mobile water tankers along the TSF facility, haul road and the approach road. Further, 10 nos. of fog/mist cannon sprayer of at least 40 m throw shall be installed at various locations in the mine area. An effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission. Mobile fog cannons should also be used to control dust generation and propagation in the tailings area and other areas.
1.3	The Project Proponent shall explore the possibility of using at least 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years. PP needs to install solar power plant at the earliest to reduce dependency on conventional power supply from state.
1.4	The Project Proponent shall provide the rainwater harvesting structure at mine offices and quarters/colonies to recharge the ground water.
1.5	PP may explore to construct rainwater harvesting structures within the ML area to reduce the dependence on groundwater.
1.6	PP should install and utilise the Oil & Grease Trap for washing of trucks, HEMM operational in their mine project. Disposal of the used oil & drums should be through authorised recyclers and as per rules. Copy of logbook of Oil withdrawn from Oil & Grease Trap should be submitted to the Regional Office of the Ministry.
1.7	PP needs to follow up with State Forest Department to expedite the approval and implementation of the wildlife conservation plan as per Wildlife Amendment Act 2022. PP needs to submit the implementation report to Ministry's Regional Office in Half-Yearly compliance reports.

S. No	EC Conditions
1.8	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimize stress conditions for wild animals and to avoid Man-Animal conflict.
1.9	The Project Proponent shall ensure the survival rate of 95% for planting the gap plantation and new plantation. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Integrated Regional Office. Density of plantation should be 2500 plants/ha). PP shall make provision for drip irrigation to conserve the water. PP should plant fruit bearing trees along with other native and allied species within the ML area.
1.10	Mechanized road sweeping machines can also be deployed if there is ore/mineral spillage on roads even after prevention.
1.11	PP shall explore the deployment of electric vehicles for ore transportation within ML area.
1.12	Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.
1.13	PP needs to submit the subsidence monitoring data to DGMS, State DMG and Ministry's Regional Office on a yearly basis. PP shall Consult DGMS and follow their recommendations and suggestion if any.
1.14	PP shall engage any National Institute of repute within 6 months to conduct environmental and safety studies related to stability, TSF design and seepage analysis of the Tailing Storage Facility for the entire tailing disposal facility. Recommendations of the above study should be followed by PP and implementation report submitted to Regional office along with six monthly compliance report. The report prepared by the above National Institute shall be shared with the DGMS also and recommendations of the DGMS, with regard to safety, if any, should be followed.
1.15	PP shall take all precautions to ensure that there is no seepage , leakage of water, silt from the tailings dams. Appropriate drains, siltation ponds, gabion structures, check dams, etc. should be in place to prevent any silt or water flow outside. Some effluent monitoring system should also be installed around the tailing dams to check whether is any seepage, leaks outside, in consultation with SPCB or CPCB.
1.16	PP should engage any National institute of repute for water quality sampling and analysis for groundwater and surface water, waterbodies in and near the vicinity of the project. The water quality report should be submitted to Regional office of MoEFCC along with six monthly compliance report.
1.17	PP shall annually undertake the study to know the impact of mining and beneficiation activity on the crop production within the study area. The report of the same shall be submitted to Ministry 's Regional Office on an annual basis. PP should also consult District authorities/ District agricultural officer periodically regarding affect on crops in the areas near the project.
1.18	The Regional Office of the MoEFCC shall do a site inspection of the project within one year from the issuance of this amendment EC. PP shall submit the certified compliance report (CCR) to

S. No	EC Conditions
	Compliance and Monitoring Division of the Ministry.
1.19	PP needs to comply with the OM dated 24.07.2024 of MoEFCC, wherein it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign “ EK Ped Ma Ke Naam” (एकपेड़माँके नाम) and the details of the same shall be uploaded in the MeriLife portal(https://merilife.nic.in).
1.20	PP shall ensure that all type of plastic waste generated from the mines shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016. In pursuant to Ministry's OM dated 18/07/2022 PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall be submitted to Ministry's Regional Office.
1.21	All other terms and conditions mentioned in the EC letter dated 13.04.2020 remains unchanged.

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
1.2	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
1.3	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
1.4	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.
1.5	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
1.6	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled “Impact of mining

S. No	EC Conditions
	activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area.“
1.7	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
1.8	This Environmental Clearance (EC) is subject to orders/ judgment of Honble Supreme Court of India, Honble High Court, Honble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
1.9	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.10	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
1.11	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
1.12	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
1.13	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area).
1.14	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

2.

S. No	EC Conditions
2.1	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
2.2	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural

S. No	EC Conditions
	development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

3. Air Quality Monitoring And Preservation

S. No	EC Conditions
3.1	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.
3.2	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
3.3	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
3.4	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.
3.5	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
3.6	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
3.7	The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.

S. No	EC Conditions
3.8	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each).covering upwind and downwind directions.
3.9	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986. 9) The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each). covering upwind and downwind directions.
3.10	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

4. Water Quality Monitoring And Preservation

S. No	EC Conditions
4.1	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
4.2	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.
4.3	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
4.4	In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.

S. No	EC Conditions
4.5	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
4.6	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
4.7	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
4.8	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
4.9	The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.
4.10	Adhere to Zero Liquid Discharge
4.11	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
4.12	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
4.13	The project proponent shall practice rainwater harvesting to maximum possible extent.
4.14	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
4.15	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
4.16	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited

S. No	EC Conditions
	laboratories.

5. Noise And Vibration Monitoring And Prevention

S. No	EC Conditions
5.1	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
5.2	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
5.3	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

6. Noise Monitoring And Prevention

S. No	EC Conditions
6.1	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
6.2	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

7. Mining Plan

S. No	EC Conditions
7.1	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).
7.2	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas

S. No	EC Conditions
	until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

8. Energy Conservation Measures

S. No	EC Conditions
8.1	Provide LED lights in their offices and residential areas.
8.2	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

9. Land Reclamation

S. No	EC Conditions
9.1	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
9.2	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
9.3	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
9.4	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

10. Waste Management

S. No	EC Conditions
10.1	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
10.2	Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)

11. Transportation

S. No	EC Conditions
11.1	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].
11.2	The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

12. Green Belt And Emp

S. No	EC Conditions
12.1	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
12.2	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

13. Green Belt

S. No	EC Conditions
13.1	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease

S. No	EC Conditions
	boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

14. Public Hearing And Human Health Issues

S. No	EC Conditions
14.1	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
14.2	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
14.3	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
14.4	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
14.5	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

15. Corporate Environment Responsibility

S. No	EC Conditions
15.1	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
15.2	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
15.3	A separate Environmental Cell both at the project and company head quarter level, with qualified

S. No	EC Conditions
	personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
15.4	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest I wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
15.5	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.
15.6	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

16. Miscellaneous

S. No	EC Conditions
16.1	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.
16.2	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
16.3	44) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
16.4	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
16.5	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
16.6	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponents website permanently.

S. No	EC Conditions
16.7	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
16.8	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
16.9	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
16.10	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
16.11	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
16.12	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
16.13	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
16.14	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
16.15	In pursuant to Ministrys O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Honble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
16.16	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
16.17	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
16.18	The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
16.19	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land

S. No	EC Conditions
	development work.
16.20	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
16.21	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
16.22	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.

17. Corporate Environment Responsibility (Cer)

S. No	EC Conditions
17.1	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.

Standard EC Conditions for (Mineral beneficiation)

1. Statutory Compliance

S. No	EC Conditions
1.1	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.
1.2	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
1.3	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
1.4	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

S. No	EC Conditions
1.5	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area).
1.6	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
1.7	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
1.8	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

2. Air Quality Monitoring And Preservation

S. No	EC Conditions
2.1	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04/06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous and their no's.)
2.2	The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
2.3	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
2.4	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
2.5	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
2.6	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986

S. No	EC Conditions
	as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.
2.7	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
2.8	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986. 9) The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each). covering upwind and downwind directions.
2.9	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
2.10	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each). covering upwind and downwind directions.
2.11	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
2.12	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
2.13	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/agglomeration.
2.14	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
2.15	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
2.16	The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.
2.17	The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

S. No	EC Conditions
2.18	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
2.19	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
2.20	Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.
2.21	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
2.22	Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
2.23	The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
2.24	Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
2.25	Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
2.26	The particulate matter emissions from the process stacks shall be less than 30 mg/Nm ³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
2.27	Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. b. Proper covered vehicle shall be used while transport of materials. c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

3. Water Quality Monitoring And Preservation

S. No	EC Conditions
3.1	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
3.2	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited

S. No	EC Conditions
	laboratories.
3.3	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
3.4	The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.
3.5	Adhere to 'Zero Liquid Discharge'
3.6	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
3.7	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
3.8	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
3.9	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
3.10	The project proponent shall practice rainwater harvesting to maximum possible extent.
3.11	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
3.12	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
3.13	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
3.14	Tyre washing facilities shall be provided at the entrance of the plant gates.
3.15	Water meters shall be provided at the inlet to all unit processes in the steel plants.
3.16	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.
3.17	The proposed project shall be designed as Zero Liquid Discharge Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage

S. No	EC Conditions
	Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
3.18	All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
3.19	Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

4. Noise Monitoring And Prevention

S. No	EC Conditions
4.1	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
4.2	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
4.3	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
4.4	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

5. Energy Conservation Measures

S. No	EC Conditions
5.1	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
5.2	Provide LED lights in their offices and residential areas.
5.3	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
5.4	Restrict Gas flaring to < 1%.
5.5	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
5.6	Provide LED lights in their offices and residential areas.

6. Waste Management

S. No	EC Conditions
6.1	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
6.2	Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)
6.3	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
6.4	Kitchen waste shall be composted or converted to biogas for further use.
6.5	Used refractories shall be recycled as far as possible.
6.6	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
6.7	The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/ . All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
6.8	A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
6.9	Solid waste utilization: a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making. b. PP shall recycle/reuse solid waste generated in the plant as far as possible. c. Used refractories shall be recycled as far as possible.

7. Green Belt And Emp

S. No	EC Conditions
7.1	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
7.2	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

8. Water Quality Monitoring And Preservation In Case Of Beneficiation Plant

S. No	EC Conditions
8.1	Tailing management plan shall be implemented as included in EIA report.
8.2	Tailings from Iron Ore beneficiation plant shall be dewatered in filter press and no slime /tailing pond shall be permitted.

9. Public Hearing And Human Health Issues

S. No	EC Conditions
9.1	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
9.2	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
9.3	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
9.4	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
9.5	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
9.6	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
9.7	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
9.8	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.
9.9	All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC. PP shall adopt nearby villages and prepare and implement a robust plan to develop them into model villages in next 10 years.

10. Corporate Environment Responsibility

S. No	EC Conditions
10.1	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.
10.2	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest I wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
10.3	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
10.4	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
10.5	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
10.6	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.

11. Miscellaneous

S. No	EC Conditions
11.1	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
11.2	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
11.3	44) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

S. No	EC Conditions
11.4	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
11.5	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
11.6	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
11.7	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
11.8	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
11.9	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
11.10	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
11.11	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
11.12	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.
11.13	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
11.14	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
11.15	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

S. No	EC Conditions
11.16	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
11.17	Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
11.18	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
11.19	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
11.20	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
11.21	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
11.22	The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
11.23	The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
11.24	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
11.25	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11.26	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
11.27	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
11.28	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by

S. No	EC Conditions
	furnishing the requisite data / information/monitoring reports.
11.29	Any appeal against this EC 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.

12. Green Belt

S. No	EC Conditions
12.1	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
12.2	Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
12.3	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

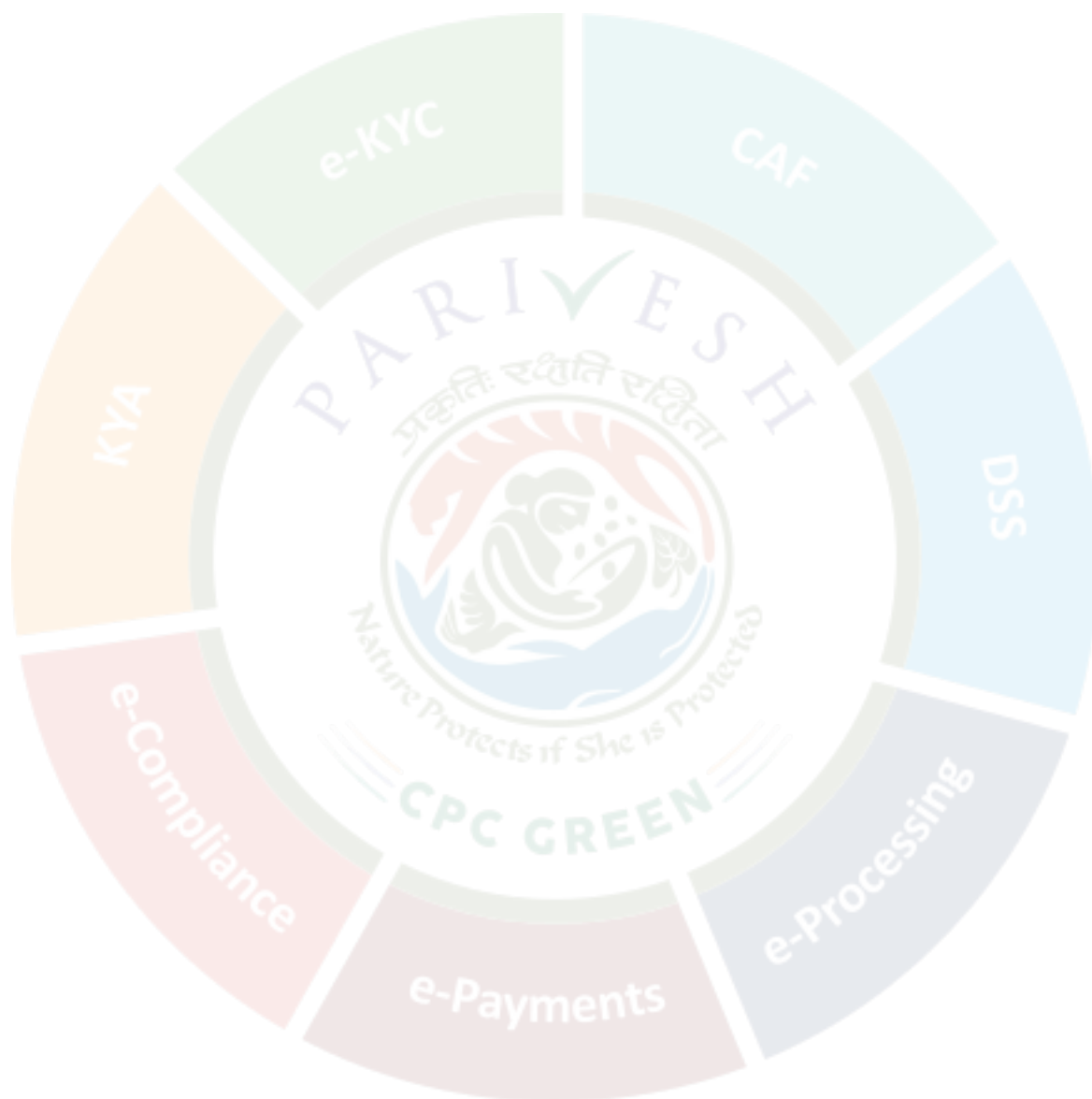
13. Environment Management

S. No	EC Conditions
13.1	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
13.2	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
13.3	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
13.4	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

Annexure 2

Amendment Logs

Description	Reference	Existing	Proposed / Amendment	Reason
Waste Generation	13.1	Wet Talling	Dry Talling	To avoid contamination of ground water



Details of the project

The instant proposal is for an Amendment in EC of Rajpura Dariba Underground Mine with production capacity of Lead-Zinc Ore from 1.08 to 2.0 MTPA (Total Excavation 2.48 MTPA) & Lead-Zinc Ore Beneficiation from 1.2 to 2.5 MTPA in the Mine lease area of 1142.2106ha (ML No. 166/2008) by M/s Hindustan Zinc located at Tehsil Relmagra, District Rajsamand, Rajasthan.

2. The details of the project submitted by the Project Proponent are given under:

i. Project details:

Name of the Proposal	Amendment in Environment Clearance issued for Rajpura Dariba Lead-Zinc Underground Mine (M.L. No. 166/2008 & Area- 1142.2106 Ha) with Production Capacity of 2.0 million TPA (Total Excavation 2.48 million TPA) & Lead Zinc Ore Beneficiation of 2.5 million TPA vide Letter No. J-11015/84/2018-IA. II (M) dated 13.04.2020.	
Location	Village (s)	Rajpura Dariba
	Tehsil	Railmagra
	District	Rajsamand
	State	Rajasthan
Company's Name	Hindustan Zinc Limited	
Accredited Consultant and certificate no.	Enkay Enviro Services Private Limited NABET/EIA/23-26/RA 0326 validity till 14.12.2026	
KML file	Attached in email and uploaded	
Seismic zone	Seismic Zone II, as per the seismic zoning map of India given in BIS code IS: 1893 (Part1)-2002.	

ii. Category details:

Category of the project	A
-------------------------	---

Schedule No.	1(a) Mining of minerals & 2 (b) beneficiation
Mining lease Area (M. L A) (in ha.)	1142.2106
General Conditions (if any)	None

iii. EC Details:

Date of application	Proposal No/ File No	Consideration by EAC	Details of EC	Date of accord
07.01.2019	F. No. J-11015/84/2018-IA.II(M)	12 th EAC Meeting held on 19-20 December 2019	Expansion of Lead Zinc Ore from 1.08 to 2.0 Million TPA (Total Excavation 2.48 million TPA) & Lead Zinc Ore Beneficiation from 1.2 Million TPA to 2.5 million TPA	13.04.2020

iv. Details of Mine Lease in chronological manner:

Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	<ol style="list-style-type: none"> Initially lease was granted for 20 years vide letter no. F.3(2) khanniz/68 dated 31.03.1970 and registered on date 30.05.1970 valid till 29.05.1990. First renewal was granted by Govt. of Rajasthan for a period of
--	---

	20 years vide letter no. ME/RAJ/CC-1/RENEW./M.L.- 2/89/1541 valid from date 30.05.1990 (first instalment) till 29.05.2000, and from 30.05.2000 to 29.05.2010 (second instalment) 3. Second renewal was granted by Govt. of Rajasthan for period for 20 years w.e.f. 30.05.2010 valid till 29.05.2030.
Date of the grant	31.03.1970
Name of the Mineral & (Major/Minor)	Lead-& Zinc (Major)
Period of Grant	60 years
Granted by	Govt. of Rajasthan
Mine lease area in Ha	1142.2106

v. Land Use/Land Cover of the Mine Lease Area:

Private land	731.92 ha
Government land	325.67 ha
Grazing Land	84.62 ha
Total Mining lease area (MLA)	1142.2106
Private land for crusher, workshop & other infrastructure outside the MLA	None
Additional information (if any)	None

vi. Mining plan details:

Mining Plan including Progressive Mine Closure Plan	Letter No.	8439/MCDR-MPC0Zn/1/2023-AJM – IBM_RO_AJM
---	------------	--

(approved by Indian Bureau of Mines/DMG)	Date	21.02.2025
	Mineral & (Major/Minor)	Lead Zinc (Major)
	Mine Lease Area, Ha	1142.20 ha.
	Validity	31.03.2030
Additional information (if any)	-	
Mining Parameters	Quantitative Description	
Method of Mining	Sub-level LHOS (Long Hole Open Stoping) with Backfilling Method (Underground mechanized mining)	
Drilling/Blasting	<p>Drilling-Wet drilling with sharp drill bits (Hole Dia 102-165 mm, hole depth up to 30 m. length)</p> <p>Blasting- Controlled blasting by optimal charging of blast holes and use of delay detonator (NONEL) using ANFO as explosive.</p>	
Geological Reserves (Total R&R)	87658042 MT	
Mineable Reserves	37842720 MT	
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	<p>Total Excavation 2.48 million TPA</p> <p>Mineral- 2.0 million TPA</p> <p>Lead Zinc Ore Beneficiation -2.5 million TPA</p>	
Life of mine	+25 years	
Mine Bench Height & Bench Width	NA	
No. of Mine Benches	NA	
Existing Depth, m bgl	NA	
Ultimate Depth of Mining, m bgl	800 m	
Ground Water Table, m bgl	<p>Pre-monsoon – 23 m bgl</p> <p>Post monsoon - 21m bgl</p>	
Details of ground water intersection	CGWA NOC for 3145 KLD Mine dewatering has been obtained vide order no. CGWA/NOC/MIN/REN/1/2025/11665, date- 30.05.2025 and valid till 06.01.2026.	
Individual bench slope	NA	
Overall pit slope	NA	

Details of existing/ proposed Crusher	Existing Crusher Details: - Primary Crusher 1 No. of 440 TPH & 1 No. of 250 TPH capacity Secondary Crusher- 1 No. of 350 TPH Tertiary Crusher: - 1 No. of 200 TPH& 1 No. of 300 TPH capacity		
Mineral Beneficiation	Lead Zinc Ore Beneficiation of 2.5 million TPA		
RoM output size	150 mm		
Transportation details including capacity of dumper/tipper, mode of transport and distance	The Mineral is being/will be transported from underground crusher to surface via skip (capacity 6.8 t) & ramp Dumper (capacity 30/45/65 tonne) located within ML area		
Generation of Topsoil/OB & its Management during plan period & conceptual period	Not Applicable, as this is an underground mine.		
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Particular	Waste (Muck)	Management
	Plan Period	1073572 m3	Part of waste will be used in stope backfilling
Additional information (if any)	Particular	Waste (Tailing)	Management
	Plan Period	3457926 m3	Part of tailing will be used in filling UG voids, rest will be sent to tailing storage facility

vii. Water requirement

Total water requirement	7465KLD	Domestic & other utilities	200 KLD
		Dust Suppression	165 KLD

	Industrial use (Mining & Beneficiation)	7100 KLD
Source	Mine dewatering water & Treated water from Udaipur Sewage Treatment Plant & Matrikundia and Mansiwakal dam	
Permission	Water withdrawal permissions are available from the Matrikundia and Mansiwakal dam	
Additional information (if any)	None	

viii. Nearest village /town /highway /interstate boundary/railway station /water bodies /monument / forest.

Particulars	Particular's Name	Distance & Directions
Village	Naya Dariba	Adjacent
Nearest District Headquarter	Rajsamand	26.35 Km, NW
Highway	NH-162A	0.3 Km. W
Interstate Boundary	None	
Railway Station/Railway line	Fatehnagar - Railway Station	12.46 Km, SSW
Water bodies	Katiya Khera Pond	Within lease area
	Usrol Talab	6.13km, SE
	Pachhamata Sagar	6.74 km, NE
	Banas River	8.10 km, N
	Bhopal Sagar Talab	8.37km, SSE
Forest	None within 10 km from the lease area.	

ix. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter issued by the concerned
---	--------	---

		Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	No	Letter from DCF, Rajsamand issued vide letter no. Letter () Survey/DCF/2018-19/7527, date-24.09.2018 stating that the No Forest land involved within lease area and No Sensitive zone falls within 10 km radius from the lease area.
National Park	No	
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone(ESZ) /Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	NA
Schedule-I species (No.s and name of schedule-I species with authenticated letter)		Total Six Schedule- I species i.e. Indian Peafowl (<i>Pavo Cristatus</i>), Indian Leopard (<i>Panthera pardus</i>), Indian Monitor Lizard (<i>Varanus bengalensis</i>), Indian Flapshell Turtle (<i>Lissemys punctata</i>), Indian Python (<i>Python molurus</i>) has been authenticated by DCF, Rajsamand vide letter no. F () Survey/DCF/2017-18/3424 on date- 28.03.2017.
Wildlife Conservation Plan		Wildlife Conservation plan for Six Schedule-I species was approved from APCCF on date-16.09.2020 and under implementation in consultation with DFO.

x. Green belt/plantation details:

Proposed area for green belt/plantation and no. of saplings proposed	Existing Plantation Area-190 ha No. of Plants- 2,06,650
Budget for green plant & plantation till the end of life of mine.	300 lakhs

Budget for nursery	-
Details of existing plantation and its survival rate	Total Plantation-190 ha No. of Plants- 206650 Survival Rate- 85%
No. of tree cuts in the mine lease area and compensatory afforestation	Nil
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	-
50 m safety zone of nallah, roads, electric lines	-
500 m safety zones of nearest habitation villages	-

xi. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)			
Period of baseline data collection		March-April-May-2017.	
Season (Summer / Pre-monsoon / Post-monsoon / Winter)		Summer Season	
Predominant Wind direction (From)		W to E direction	
Ambient Air Quality (no. of locations) and results		8	
	Particular	Results	Standard
	PM10	52 to 82 $\mu\text{g}/\text{m}^3$	100 $\mu\text{g}/\text{m}^3$
	PM 2.5	22 to 45 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$
	SO2	6.0 to 20 $\mu\text{g}/\text{m}^3$	80 $\mu\text{g}/\text{m}^3$
	NO2	6.0 to 34 $\mu\text{g}/\text{m}^3$	80 $\mu\text{g}/\text{m}^3$

	CO	0 to 490 µg/m ³	2000 µg/m ³																					
Noise level (no. of locations) and results	<table><tr><td>8</td></tr><tr><td><table><tr><td>Day Time</td><td>51.7 to 53.1 Leq dB (A)</td></tr><tr><td>Night Time</td><td>40.8 to 43.2 Leq dB (A)</td></tr></table></td></tr></table>				8	<table><tr><td>Day Time</td><td>51.7 to 53.1 Leq dB (A)</td></tr><tr><td>Night Time</td><td>40.8 to 43.2 Leq dB (A)</td></tr></table>	Day Time	51.7 to 53.1 Leq dB (A)	Night Time	40.8 to 43.2 Leq dB (A)														
8																								
<table><tr><td>Day Time</td><td>51.7 to 53.1 Leq dB (A)</td></tr><tr><td>Night Time</td><td>40.8 to 43.2 Leq dB (A)</td></tr></table>	Day Time	51.7 to 53.1 Leq dB (A)	Night Time	40.8 to 43.2 Leq dB (A)																				
Day Time	51.7 to 53.1 Leq dB (A)																							
Night Time	40.8 to 43.2 Leq dB (A)																							
Water Quality (no. of locations) and results	<table><tr><td>8 No. of Locations of Ground Water Quality Monitoring</td></tr><tr><td><table><tr><td>pH</td><td>6.72 to 7.84</td></tr><tr><td>Total Hardness</td><td>16 to 912 mg/l</td></tr><tr><td>Alkalinity</td><td>258 to 1152 mg/l</td></tr><tr><td>TDS</td><td>664 to 3520 mg/l</td></tr></table></td></tr><tr><td>3 No. of Locations of Surface Water Quality Monitoring: -</td></tr><tr><td><table><tr><td>pH</td><td>7.27- 7.93</td></tr><tr><td>BOD</td><td>5.2 – 8.3 mg/l</td></tr><tr><td>COD</td><td>54- 103 mg/l</td></tr><tr><td>DO</td><td>4.6 – 5 mg/l</td></tr></table></td></tr></table>				8 No. of Locations of Ground Water Quality Monitoring	<table><tr><td>pH</td><td>6.72 to 7.84</td></tr><tr><td>Total Hardness</td><td>16 to 912 mg/l</td></tr><tr><td>Alkalinity</td><td>258 to 1152 mg/l</td></tr><tr><td>TDS</td><td>664 to 3520 mg/l</td></tr></table>	pH	6.72 to 7.84	Total Hardness	16 to 912 mg/l	Alkalinity	258 to 1152 mg/l	TDS	664 to 3520 mg/l	3 No. of Locations of Surface Water Quality Monitoring: -	<table><tr><td>pH</td><td>7.27- 7.93</td></tr><tr><td>BOD</td><td>5.2 – 8.3 mg/l</td></tr><tr><td>COD</td><td>54- 103 mg/l</td></tr><tr><td>DO</td><td>4.6 – 5 mg/l</td></tr></table>	pH	7.27- 7.93	BOD	5.2 – 8.3 mg/l	COD	54- 103 mg/l	DO	4.6 – 5 mg/l
8 No. of Locations of Ground Water Quality Monitoring																								
<table><tr><td>pH</td><td>6.72 to 7.84</td></tr><tr><td>Total Hardness</td><td>16 to 912 mg/l</td></tr><tr><td>Alkalinity</td><td>258 to 1152 mg/l</td></tr><tr><td>TDS</td><td>664 to 3520 mg/l</td></tr></table>	pH	6.72 to 7.84	Total Hardness	16 to 912 mg/l	Alkalinity	258 to 1152 mg/l	TDS	664 to 3520 mg/l																
pH	6.72 to 7.84																							
Total Hardness	16 to 912 mg/l																							
Alkalinity	258 to 1152 mg/l																							
TDS	664 to 3520 mg/l																							
3 No. of Locations of Surface Water Quality Monitoring: -																								
<table><tr><td>pH</td><td>7.27- 7.93</td></tr><tr><td>BOD</td><td>5.2 – 8.3 mg/l</td></tr><tr><td>COD</td><td>54- 103 mg/l</td></tr><tr><td>DO</td><td>4.6 – 5 mg/l</td></tr></table>	pH	7.27- 7.93	BOD	5.2 – 8.3 mg/l	COD	54- 103 mg/l	DO	4.6 – 5 mg/l																
pH	7.27- 7.93																							
BOD	5.2 – 8.3 mg/l																							
COD	54- 103 mg/l																							
DO	4.6 – 5 mg/l																							
Soil Quality (no. of locations) and results	<table><tr><td>8 No. of Locations of Soil Quality Monitoring</td></tr><tr><td><table><tr><td>pH</td><td>6.98 to 7.84</td></tr><tr><td>Type of Soil</td><td>Sandy Load & Clay Loam</td></tr><tr><td>Nitrogen</td><td>3.1 to 16.2 %</td></tr><tr><td>Phosphorus</td><td>14.3 to 86.6 mg/kg</td></tr><tr><td>Potassium</td><td>178.23 to 4858.32 mg/kg</td></tr></table></td></tr></table>				8 No. of Locations of Soil Quality Monitoring	<table><tr><td>pH</td><td>6.98 to 7.84</td></tr><tr><td>Type of Soil</td><td>Sandy Load & Clay Loam</td></tr><tr><td>Nitrogen</td><td>3.1 to 16.2 %</td></tr><tr><td>Phosphorus</td><td>14.3 to 86.6 mg/kg</td></tr><tr><td>Potassium</td><td>178.23 to 4858.32 mg/kg</td></tr></table>	pH	6.98 to 7.84	Type of Soil	Sandy Load & Clay Loam	Nitrogen	3.1 to 16.2 %	Phosphorus	14.3 to 86.6 mg/kg	Potassium	178.23 to 4858.32 mg/kg								
8 No. of Locations of Soil Quality Monitoring																								
<table><tr><td>pH</td><td>6.98 to 7.84</td></tr><tr><td>Type of Soil</td><td>Sandy Load & Clay Loam</td></tr><tr><td>Nitrogen</td><td>3.1 to 16.2 %</td></tr><tr><td>Phosphorus</td><td>14.3 to 86.6 mg/kg</td></tr><tr><td>Potassium</td><td>178.23 to 4858.32 mg/kg</td></tr></table>	pH	6.98 to 7.84	Type of Soil	Sandy Load & Clay Loam	Nitrogen	3.1 to 16.2 %	Phosphorus	14.3 to 86.6 mg/kg	Potassium	178.23 to 4858.32 mg/kg														
pH	6.98 to 7.84																							
Type of Soil	Sandy Load & Clay Loam																							
Nitrogen	3.1 to 16.2 %																							
Phosphorus	14.3 to 86.6 mg/kg																							
Potassium	178.23 to 4858.32 mg/kg																							

Hydro geological study and results	<p>Water level Core Zone is given as under: -</p> <p>Pre-monsoon – 23 m bgl.</p> <p>Post- monsoon – 21 m bgl.</p> <p>Water level Buffer Zone is given as under: -</p> <p>Pre-monsoon – 33m bgl.</p> <p>Post- monsoon – 30 m bgl.</p>
Traffic study (no. of locations) and results	-

xii. Public Hearing (PH) Details

Public Hearing (PH) Details: Public Hearing for the EC was already conducted on 29.10.2018. Public Hearing for Amendment of EC not required.

xiii. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine: This Proposal is for ToR.

Particulars	Details of Letter along with date of grant and validity
Consent to Establish	This is an existing Rajpura Dariba Underground Mine.
Consent to Operate	<p>Consent to Operate (Mine-Lead & Zinc Ore-2.0 Million TPA) has been obtained from Rajasthan State Pollution Control Board, vide letter no. Order No. 2022-2023/Mines/10763, date-28.02.2023, which is valid up to 29.02.2028.</p> <p>Consent to Operate (Lead Zinc Ore Beneficiation-1.2 Million TPA) has been obtained from Rajasthan State Pollution Control Board,</p>

	vide letter no. Order No. 2023-2024/HDF/9456, date- 26.09.2023, which is valid up to 29.02.2028.																																																														
Certified Compliance Report and Inspection date	EC Compliance report is certified from IRO, Jaipur, vide letter no. IV/Env/Raj/MINE-579/994/2019, date- 28.04.2025.																																																														
Certified Production Details from the inception of the mine (in tabular form against the EC capacity)	<p>Authenticated Past Production details is given as under:</p> <table> <tr> <th>Year</th><th>Ore Production in MT</th></tr> <tr><td>1992-1993</td><td>631407</td></tr> <tr><td>1993-1994</td><td>423805</td></tr> <tr><td>1994-1995</td><td>248652</td></tr> <tr><td>1995-1996</td><td>367550</td></tr> <tr><td>1996-1997</td><td>311750</td></tr> <tr><td>1997-1998</td><td>351710</td></tr> <tr><td>1998-1999</td><td>314890</td></tr> <tr><td>1999-2000</td><td>282890</td></tr> <tr><td>2000-2001</td><td>273400</td></tr> <tr><td>2001-2002</td><td>375770</td></tr> <tr><td>2002-2003</td><td>549770</td></tr> <tr><td>2003-2004</td><td>585743</td></tr> <tr><td>2004-2005</td><td>527328</td></tr> <tr><td>2005-2006</td><td>506527</td></tr> <tr><td>2006-2007</td><td>507560</td></tr> <tr><td>2007-2008</td><td>505749</td></tr> <tr><td>2008-2009</td><td>483293</td></tr> <tr><td>2009-2010</td><td>501282</td></tr> <tr><td>2010-2011</td><td>496234</td></tr> <tr><td>2011-2012</td><td>587600</td></tr> <tr><td>2012-2013</td><td>554354</td></tr> <tr><td>2013-2014</td><td>610242</td></tr> <tr><td>2014-2015</td><td>573284</td></tr> <tr><td>2015-2016</td><td>668777</td></tr> <tr><td>2016-2017</td><td>745534</td></tr> <tr><td>2017-2018</td><td>895568</td></tr> <tr><td>2018-2019</td><td>1079955</td></tr> <tr><td>2019-2020</td><td>1037607</td></tr> <tr><td>2020-2021</td><td>1215171</td></tr> <tr><td>2021-2022</td><td>1252365</td></tr> </table>	Year	Ore Production in MT	1992-1993	631407	1993-1994	423805	1994-1995	248652	1995-1996	367550	1996-1997	311750	1997-1998	351710	1998-1999	314890	1999-2000	282890	2000-2001	273400	2001-2002	375770	2002-2003	549770	2003-2004	585743	2004-2005	527328	2005-2006	506527	2006-2007	507560	2007-2008	505749	2008-2009	483293	2009-2010	501282	2010-2011	496234	2011-2012	587600	2012-2013	554354	2013-2014	610242	2014-2015	573284	2015-2016	668777	2016-2017	745534	2017-2018	895568	2018-2019	1079955	2019-2020	1037607	2020-2021	1215171	2021-2022	1252365
Year	Ore Production in MT																																																														
1992-1993	631407																																																														
1993-1994	423805																																																														
1994-1995	248652																																																														
1995-1996	367550																																																														
1996-1997	311750																																																														
1997-1998	351710																																																														
1998-1999	314890																																																														
1999-2000	282890																																																														
2000-2001	273400																																																														
2001-2002	375770																																																														
2002-2003	549770																																																														
2003-2004	585743																																																														
2004-2005	527328																																																														
2005-2006	506527																																																														
2006-2007	507560																																																														
2007-2008	505749																																																														
2008-2009	483293																																																														
2009-2010	501282																																																														
2010-2011	496234																																																														
2011-2012	587600																																																														
2012-2013	554354																																																														
2013-2014	610242																																																														
2014-2015	573284																																																														
2015-2016	668777																																																														
2016-2017	745534																																																														
2017-2018	895568																																																														
2018-2019	1079955																																																														
2019-2020	1037607																																																														
2020-2021	1215171																																																														
2021-2022	1252365																																																														

xiv. Rehabilitation & Resettlement:

R & R details	NA
---------------	----

xv. Court case details:

Court Case, No and its present status	PP has stated that no litigation is pending against the project.
Undertaking by Project Proponent w.r.t court case	PP has submitted an affidavit vide letter dated 30.05.2025.

xvi Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	As per the OM dated 30.05.2018, an Affidavit vide letter dated 30.05.2025 stating that we will comply with all the statutory requirements and as per the judgment of Hon'ble SC order dated 02/08/2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause Vs Union of India is attached.
---	--

xvii. ADS details (If any): ADS-1 Raised on date 23.06.2025: Proposal No: IA/RJ/MIN/535799/2025, File No. File No: IA-J-11015/84/2018-IA-II(M). The Reply is given as under:

S. No	Points	Reply
1	PP shall submit a detailed justification/clarification regarding the execution of certain associated activities that are being partially carried out both within and outside the Mining Lease (ML) area. The clarification must be obtained after consultation with the State	RD mine has been operational since 1984 as Public Sector company. Since than about 82 ha of area was acquired for construction of tailing dam outside of the mine lease area This has been already disclosed in various mining plan approvals from 1995 to 2025 wherein it was clearly mentioned and shown

	Department of Mines and Geology (DMG), duly informing them of the same.	that tailing dam majorly fall out of lease area and same is being used for stacking of tailing generated from the RD mines as well. As per approved Mining Plan along-with Progressive Mine closure plan date-21.02.2025 about 68.14 Ha area is proposed for stacking of dry tailings within the lease area and tailing dam. A Formal Letter has been submitted to the Office of DMG regarding information about activities carried out pursuant to the EAC ADS.
2	PP must provide a comprehensive action plan addressing all "Being Complied" and "Agreed for Compliance" conditions mentioned in the Certified Compliance Report issued by the Regional Office. The plan should include timelines and responsible persons/agencies for implementation/ complete compliance.	Certified Compliance Report from IRO, Jaipur is issued vide letter no. IV/Env/Raj/MINE-579/994/2019 dated 28th April, 2025. "The term ' being complied ' denotes that the activity is of a continual or ongoing nature. " Agreed for Compliance ' signifies the applicant's consent and commitment to adhere to the applicable regulatory requirements."
3	PP is required to submit an authenticated list of flora and fauna from the competent authority, as per the provisions of the Wildlife (Protection) Amendment Act, 2022 and prepare a wildlife conservation plan accordingly.	We would like to bring in your kind notice that the list of flora and fauna has been authenticated from the office of DCF Rajsamand vide letter no. F () Survey/DCF/2017-18/3424, date- 23.08.2017. As per authenticated list wild life conservation plan for six Schedule-I species was approved by the Chief Wildlife Warden vide letter no: F 11(676)VIKAS-II/MVJP/2019-20/154 dated 16.09.2020 . About 6.60 Cr was proposed for WLCP implementation out of which 3.98 Cr. (60%) was spent till date in line with wildlife conservation in below mentioned heads.

BUDGET INCURRED FOR WLC

Sr. No.	SOP	Planned Cost (in lac)	Expenditure (in lac)
1	Habitat improvement, mitigation measures (food, water, shelter, movement etc.) and measures to reduce/minimize the human animal conflict	330	210

2	Awareness and extension (Forest staff will also be invited for various activities to ensure participation)	66	8.5
3	Support to Forest department for monitoring, rescue and rehabilitation of Wildlife (Veterinary care, animal health, rescue, tools and equipment's, etc.)	66	30
4	Contribution towards conservation of wildlife in PAs (to be deposited in RPACS)	66	66
5	Administrative cost for processing inspections, etc. (to be deposited in RPACS)	66	66
6	Miscellaneous including Eco-development	66	18
Total		660	398.5

Apart from this Wildlife conservation plan as per the provision of the Wildlife (Protection) Amendment Act, 2022 is submitted to DCF, Rajsamand date-16.07.2025.

4	PP shall submit the current status of the 7.5-meter greenbelt plantation along the ML boundary, as stipulated in the Environmental Clearance. This submission must be supported by geo-tagged photographs to validate compliance.	Total mine lease area is 1142.2106 ha, out of which 554 ha area (423.78 ha within lease & 130.22 ha outside the lease) has been acquired for mining and associated activities. Therefore, Plantation has been done in acquired area only. Total Plantation has been done on 190 ha area (143.46 ha within lease including dump (3.0 ha) & 46.54 ha in buffer area (outside the lease) which is 34.28 % of acquired area with 206650 no. of plants.
5	A detailed water balance report must be submitted, clearly indicating water usage for various components of the project, including mining operations and the beneficiation plant. The report should also include source-wise supply and consumption breakup.	Total Water requirement detail is given as under:

WATER REQUIREMENT

S. No	Particular	In KLD	Source	Remark
1	Domestic & other utilities	200	Matrikundia Dam & Mansiwaka Dam	50 KLD waste water is being/will be treated in 100 KLD STP and 45 KLD

				treated water is being/will be use for Plantation
2	Dust Suppression	165	RDM Dewatering	<ul style="list-style-type: none">• 3145 KLD water is being/will be sourced from mine dewatering.• Out of which 165 KLD for dust suppression & 2980 KLD sent to Reservoir and after evaporation loss about 2940 KLD use for Mineral beneficiation.• CGWA NoC for mine dewatering has been taken.
3	Industrial use (Mining & Beneficiation)	7100	Udaipur STP -60 KLD RDM Dewatering- 2940 Dry Tailing Plant - 4100	
4	Total	7465		
6	PP should provide the groundwater levels of nearby wells/ Piezometers, pre & post monsoon for last five years. Comparison with groundwater levels during the start of the project may also be done. Geo coordinates of wells, piezometers and their photographs should also be submitted.			Ground water levels of nearby wells/ Piezometers in pre & post monsoon was examined in last five years, it is gathered that there is no significant variation is found.
7	The PP is required to provide details of the protection measures already implemented, as well as those proposed, for safeguarding the Katiya Khera Pond located within the ML area. This should include structural and ecological safeguards planned to ensure water quality and also safety for underground workings.			<p>The Katiya Khera Pond is at about 700 m away in SW direction from underground mining activity. In order protect the pond following mitigation measures is being/will be taken:</p> <ul style="list-style-type: none">➤ All the rain water falling on dumps, paved and mine roads etc. is being/will be collected in the pond within the mine area and is gainfully utilized for dust suppression, plantation & etc.➤ Domestic waste water is being/will be treated in STP of 100 KLD capacity and treated water is being/will be used for plantation. No waste water is being/will be discharged in pond.➤ Garland drains around the waste dump along with a pond for collection of rain water has been constructed.

		<ul style="list-style-type: none"> ➤ Plantation has been done in the safety zone. ➤ Water quality monitoring is being/will be regularly carried out.
8	PP should submit the copy of the register/record being maintained for subsidence monitoring. It should also be specified whether any subsidence incidence has been reported in the mine.	Subsidence monitoring register is being maintained over the site, there is no subsidence incidence has been reported at mine till today.
9	PP should clarify whether there may be safety issues due to tailing dam in the Northeast direction of the mine. Has any consultation with DGMS been done in this regard?	<p>There is no safety concerns associated with the tailings dam located to the northeast of the mine. A dam break analysis was conducted in 2019 by the internationally recognized firm M/s Golder Associates (Australia). Five recommendations were suggested and all have been implemented.</p> <p>There is no concern or safety issues w,r,t mining as the ore body is 0.5 km away from the proposed Tailing Storage Facility (TSF) for dry tailing stacking and end limit of ore body is 1.14 kms vertically.</p>
10	PP should consult Indian Bureau of Mines regarding location of tailing dam in the North East direction. It should be clarified whether there is mineral below the tailing dam.	<p>The Indian Bureau of Mines has approved the proposed area of Tailing Storage Facility under Review of Mining Plan approved vide letter no. 8439/MCDR-MPC0Zn/1/2023-AJM-IBM_RO_AJM, dated 21/02/2025.</p> <p>The area of proposed tailing storage facility has been endorsed by Indian Bureau of Mines by looking at the ore body configuration as marked on the transverse section of 2400N.</p> <p>Tailing Storage Facility shown on approved Financial Assurance Plan (Page no. 263 of M.P).</p>
11	PP should submit compliance that they have submitted to DGMS regarding their Mining inspection for last two years. It should be clarified whether any safety issue related to location of tailing dam in the mine lease area has been raised by DGMS.	No safety concern was raised during DGMS inspections in last two years regarding tailing dam. Apart from this the compliance of DGMS observation has been done.

12	<p>PP should submit the studies that they have conducted related to tailing dam, its safety and environment related issues. Precautions that need to be taken to prevent any contamination of ground water should also be submitted.</p>	<p>The various studies have been conducted for safety and environment of tailing dam, which are listed below:</p> <p>Dam Break Analysis: Dam break analysis was conducted for tailing storage facility in July 2019 from the renowned international firm i.e. M/s Golder, Australia. The study covers various scenarios for Dam break like Breach location, Potential hydrological conditions, Failure Mechanism and Breach Scenarios. Five recommendations were suggested and all have been implemented.</p> <p>Designing of TSF: Design for height raising of tailing dam was done by, Department of Civil Engineering, Indian Institute of Science (IISc), Bangalore in 2019 and recommendation has been accepted.</p> <p>Designing of Dry Stacking: Designing of dry stacking was done by M/s Strata India. Analysis report also has the stability analysis of existing tailing dam under the loading of proposed expansion of tailing dam.</p> <p>Leaching potential of tailings: A detailed assessment was done by NEERI Nagpur in 2024 for leaching potential of tailing as per the assessment of leaching potential of the tailing revealed that various chemicals constitutes and heavy metals present in the tailing are not amenable to leaching under the worst-case scenario as their concentration in leachate did not exceed the stipulated regulatory limits. There are six piezometric wells installed nearby tailing dam. Three are in upstream and three are in downstream. The results were found within prescribed limit.</p>
----	--	--

Reply of ADS-2: - ADS-2 Raised on date 31.08.2025: Proposal No: IA/RJ/MIN/535799/2025, File No. File No: IA-J-11015/84/2018-IA-II(M). The Reply is given as under:

S. No	Points	Reply
1	PP stated that CCR is continual activity. There seems to be an error in the sentence. PP needs to rectify the action plan with respect to budget and activities earmarked for CSR/CER activities.	The mention CCR is a continual activity was erratically mentioned, which is regretted, this is periodic time curated demand as stated by MOEF&CC as and when applicable., while compliance to the EC conditions is a continual activity. Action plan with respect to budget and activities, responsibility and timeline as earmarked for CSR/CER activities has been submitted
2	PP needs to elaborate on activities and budget for Disaster Management Plan. Safety aspects of tailing dams may also be included in the Disaster Management plan.	Disaster Management Plan for Mine has been submitted. Disaster Management Plan for Tailing dam has been submitted. Activities & budget for Disaster Management Plan has been submitted.
3	PP needs to submit the copy of study of impact of mining and beneficiation on crop production.	Copy of study of impact of mining and beneficiation on crop production has been submitted.
4	PP has stated in action plan "Waste generated due to mining is used for filling of voids in slopes"(in sl. No.16 VI-land reclamation). It seems an error. PP need to rectify the error.	The word slopes may kindly be read as stopes, the same is corrected and has been submitted.
5	PP has mentioned "closed" against the issues raised by DGMS. PP should explain the steps taken/arrangements done to comply with the issues raised by DGMS (mining). Copy of latest consecutive DGMS(Mining) inspection reports (latest two) need to be submitted.	Steps taken/arrangements done to comply with the issues raised by DGMS has been submitted. Latest consecutive DGMS inspection reports has been submitted.
6	Tailing dam study by IISC Bangalore was done in the year 2018-2019. Has any latest study been envisaged to ascertain the safety aspects involved in the tailing dam?	Both the reports pertaining to IISC Bangalore (2018-2019) and Stability Analysis report by Strata India in year 2022 w.r.t. Safety Designing of dry stacking & stability analysis of existing tailing dam under the loading of proposed expansion of tailing dam was done.
7	Details of Expenditure of the EMP with respect to capital and recurring cost need to be submitted.	Expenditure of the EMP with respect to capital and recurring cost has been submitted.

8	Certified production details from 01 April 2022 to 31.07.2025 needs to be submitted.	Certified production details from 01 April 2022 to 31.07.2025 has been submitted
---	--	--

xviii Details of the Environment Management Plan (EMP).

S. No	Particulars	Existing		Additional		Total	
		Capital	Recurring	Capital	Recurring	Capital	Recurring
1	Dust control/suppression systems	0.5	1	0.3	0.5	0.8	1.5
2	Tailing Dam management/ Dry Tailing Disposal	4.5	1	11.5	1	16	2
3	Tailing thickener	0.5	0.2	-	-	0.5	0.2
4	Surface water sprinkler	0.25	0.05	0.5	0.05	0.75	0.1
5	Mechanical road sweeper	0.25	0.05	0.5	0.05	0.75	0.1
6	Ventilation System	3	0.5	3	0.5	6	1
7	Rainwater harvesting measures/ Deepening of existing Village Tanks	0.1	0.01	55	0.1	55.1	0.11
8	Plantation/Green belt development with drip irrigation system	2	0.1	1	0.1	3	0.2
9	Different Environmental	0.1	0.02	0.2	0.02	0.3	0.04

	Monitoring equipment						
10	Automation in Environment Monitoring (CAAQMs)	0	0	2.5	0.2	2.5	0.2
11	Construction of Garland drain and silt settling tank and recycle system for waste dump management	0.25	0.05	-	-	0.25	0.05
12	Schedule-I fauna conservation plan cost	0	0	5.76	0.84	5.76	0.84
13	Installation of Oil grease trap system & Sewage treatment plant	0.05	0	3	0.2	3.05	0.2
14	Water hydrant system	0.25	0.05	-	-	0.25	0.05
15	High density/ Paste Fill	1.5	0.1	15	1	16.5	1.1
16	Hazardous waste storage facility	0	0	0.5	0	0.5	0
17	Bag filters/ dedusting system	0.5	0	1.5	0	2	0
18	Mobile Water tankers	0.25	0.05	-	-	0.25	0.05
	Grand Total (Rs. in cr.)	14	3.18	100.26	4.56	114.26	7.74

19	Enterprise Social Commitment (ESC) & CER @2.5%			16.5			
----	--	--	--	------	--	--	--

xix. Details of project cost and employment:

Particulars	(Rs. in Crore)
Total cost of EMP (Capital Cost of EMP)	Capital Cost EMP- 114.26 Cr. Recurring Cost- 7.74 Cr.
Project Cost	Project Cost-660 Crore;
Employment	1862

3. Observation and Recommendation of the committee:

This proposal is for Amendment in the Environmental Clearance dated 13.04.2020 for Rajpura Dariba Lead-Zinc Underground Mine (M.L. No. 166/2008 & Area- 1142.2106 Ha) with Production Capacity of 2.0 million TPA (Total Excavation 2.48 million TPA) & Lead Zinc Ore Beneficiation of 2.5 million TPA by M/s Hindustan Zinc located at Tehsil Relmagra, District Rajsamand, Rajasthan.

The project proponent has requested to amend the EC letter dated 13.04.2020 for switching over to a dry tailing disposal facility within the lease area to a height of 70 meters of stacking.

The Project Proponent has stated that the mining lease for Lead and Zinc (Major minerals) was initially granted by the Government of Rajasthan on 31.03.1970, vide letter no. F.3(2) Khanniz/68, for a period of 20 years. The lease was registered on 30.05.1970 and remained valid until 29.05.1990. The first renewal of the lease was granted for a further period of 20 years by the Government of Rajasthan vide letter no. ME/RAJ/CC-1/RENEW. /M.L.-2/89/1541, covering two instalments: the first from 30.05.1990 to 29.05.2000, and the second from 30.05.2000 to 29.05.2010. Subsequently, the second renewal was granted for another 20 years, effective from 30.05.2010 to 29.05.2030.

The total Mining Lease Area comprises of 1142.2106 ha, which includes 731.92 hectares of private land, 325.67 hectares of Government land, and 84.62 hectares of grazing land.

The Mining Plan, including the Progressive Mine Closure Plan, for Lead-Zinc (Major mineral) over a lease area of 1142.2106 ha, has been approved by the Indian Bureau of Mines (IBM) vide letter no. 8439/MCDR-MPC0Zn/1/2023-AJM – IBM_RO_AJM dated 21.02.2025. The validity of the approved plan till 31.03.2030.

The mining lease area is located adjacent to the village Naya Dariba. National Highway NH-162A is located 0.3 km to the west of the lease area. There is no interstate boundary in the vicinity. The nearest railway station is Fatehnagar, located about 12.46 km to the south-southwest. Several water bodies are present in and around the lease area, including the Katiya Khera Pond, which lies within the lease area. Other nearby water bodies such as Usrol Talab (6.13 km, southeast), Pachhamata Sagar (6.74 km, northeast), Banas River (8.10 km, north), and Bhopal Sagar Talab (8.37 km, south-southeast).

The PP reported that the lease area does not include any forest lands and submitted Lr No (पता () सरे/उरसं/) /2018-19/7528 dated 24.09.2018 issued by DFO (Wildlife), Rajsamand. The PP also submitted that there is no protected area, such as a National Park or Wildlife Sanctuary within 10 KM of the mining lease and submitted Lr. No (पता () सरे/उरसं/) 2018- 19/3424 dated 23.08.2017 issued by DFO (Wildlife), Rajsamand wherein it has been mentioned that there is no National Park, Wildlife Sanctuary, Ramsar Site, Tiger/Elephant Reserve within core and buffer zone of the mining lease.

Consent to Operate for the mine (Lead & Zinc Ore – 2.0 Million TPA) has been obtained from the Rajasthan State Pollution Control Board, vide letter no. 2022-2023/Mines/10763 dated 28.02.2023. The consent is valid up to 29.02.2028.

The Project Proponent (PP) has informed that, in compliance with paragraph no. 7 of the Environmental Clearance dated 13.04.2020 and as per the condition no. 11 of the Consent to Operate (CTO) issued on 26.09.2023 for Lead-Zinc Ore Beneficiation activity, the adoption of a dry tailing disposal system within the lease area is proposed, permitting stacking up to 70 meters. The proposal entails enhancing the capacity of the existing tailing dam by constructing a reinforced soil wall through vertical raising, thereby enabling storage of fully dried tailings up to the approved height.

EAC noted the submission of PP and thereafter, EAC deliberated the ADS points raised vide minutes in the 45th EAC meeting held on 6th June 2025.

Regarding justification/clarification for the execution of certain associated activities being carried out partially within and outside the Mining Lease (ML) area, PP submitted that the mines are operative since 1984 under Public Sector, where in the tailing's disposal for both the mines was common and has been reported and approved in all the mining plans since then. PP also stated that they have informed State DMG regarding the activities explicitly vide letter dated 01.08.2025.

With regard to submission of authenticated list of flora and fauna as per Wildlife Amendment Act 2022, PP stated that Authenticated list of flora and fauna was obtained vide letter.no. Survey /DCF/2017-18/3424 dated-23.08.2017. Wildlife conservation plan for Thirty-one Schedule-I species was submitted to DCF, Rajsamand on 16.07.2025. EAC noted the submission of PP and asked PP to follow up with State Forest Department to expedite the approval and implementation of the wildlife conservation plan. EAC also directed PP to submit the implementation report to Ministry's Regional Office in Half-Yearly compliance reports.

The proposed area for green belt development and plantation includes an area of 190ha, with a total of 2,06,650 saplings. The survival rate of the existing plantation is approximately 85%. A budget of ₹300 lakhs has been allocated for green belt development and plantation activities till the end of the life of the mine

Regarding, current status of the 7.5- meter greenbelt plantation along the ML boundary, PP submitted that mining operation are underground since inception in 1984. The total perimeter of the lease area is about 11.2106 Ha.(13.6 km length and 7.5 m width), It comprises of 90 % of land belonging to private owners and rest of 10% either falls within plant area , tailing dam and water reservoir. However, the area of 190Ha is under Plantation (Which attributes to 143.46 ha under Smelter within lease, the total number of existing trees area 2, 06,650 number. About 46.54 ha has been planted in buffer area (outside the lease). Total Plantation has been done on 190 ha area which is 34.28 % of acquired area. The existing density of plantation is 1440 per ha and it is planned to be increased to 2000 per ha within one

year. EAC noted the submission of PP and advised PP to plant atleast 2500 plants/ha.

On the issue of submission of detailed water balance report indicating water usage for various components of the project, PP submitted that 200 KLD shall be sourced from Matrikundia Dam & Mansiwakal Dam for use in Domestic & other utilities. Around 50 KLD waste is being/will be treated in 100 KLD STP and 45 KLD treated waste water is being/will be used for plantation.

For dust suppression, about 165 KLD water is sourced from RDM Dewatering. For industrial use (mining & beneficiation), 7100 KLD is sourced from Udaipur STP (60KLD), RDM Dewatering (2940 KLD) and Dry Tailing Plant (4100 KLD). PP also informed that they have obtained 3145 KLD CGWA NOC for dewatering of mine, out of which 165 KLD is used for dust suppression as mentioned above and 2940 KLD is used for Mineral Beneficiation. EAC noted the submission of PP and advised to construct rainwater harvesting structures within the ML area to reduce the dependence on groundwater.

Regarding the groundwater levels of nearby wells/piezometers, during pre and post monsoon period, PP stated that they have been monitored in both pre- and post-monsoon periods over the last five years, revealing no significant variation. PP also provided the geotagged photographs of key well and piezometer installed in the ML area. As per the data provided by PP, the water level during the year 1990 post monsoon was 19 m bgl. The last five year (2020-2024) post monsoon water level stands between 1.5 to 14.5 m bgl whereas pre monsoon (2020-2024) level stands at 3 to 21 m bgl.

With regard to details of protection measures already implemented for Katiya Khara pond, PP mentioned that the spread of the pond is 175.20 Ha. The pond is protected with a Bund gabion wall of 13 m width and 1.59 km length which is stabilized. About 50,000 trees are already existing in the area around the pond for protection.

In reference to subsidence monitoring, PP submitted the record for subsidence monitoring data for the year 2018, 2019, 2024 and 2025. PP submitted that as per monitoring data no reported incidents of subsidence took place at the mine site. EAC noted the submission of PP and advised the PP to submit the subsidence monitoring data to DGMS, State DMG and Ministry's Regional Office on a yearly basis.

On issues concerning the safety of tailing dam, PP submitted that to identify potential safety issues associated with the tailings dam located in the northeast direction the Dam break analysis was conducted in 2019, by the internationally recognized firm M/s Golder Associates (Australia) and five recommendations were suggested and all have been implemented. PP stated that no safety concern was raised during DGMS inspections in last two years regarding tailing dam.

In reference to consultation with IBM regarding the presence of mineral below tailing dam, PP stated that the Indian Bureau of Mines has approved the proposed area of Tailing Storage Facility under Review of Mining Plan approved vide letter no. 8439/MCDR-MPC0Zn/1/2023-AJMIBM_ RO_AJM, dated 21/02/2025. The area of proposed tailing storage facility has been endorsed by Indian Bureau of Mines by looking at the ore body configuration as marked on the transverse section of 2400N. PP also submitted the transverse section plan and as per the plan the orebody end limit located at -623 mRL and it is 530 m away from the proposed TSF limit.

Regarding submission of studies related to tailing dam safety, PP submitted that various studies related to tailing dam, its safety, environmental issues are being conducted periodically. PP stated that on earlier occasion, the tailing dam study was conducted by IISC Bangalore during 2018-2019, to assess the safety and environmental impact of the tailings dam, including a dam break analysis & TSF design. PP also informed that a study was carried out by Strata India in 2022 w.r.t. Safety Designing of dry stacking & stability analysis of existing tailing dam under the loading of proposed expansion of tailing. PP also informed that the study was vetted by Prof T.G. Sitharam, Retd. Director IIT Guwahati. PP further vide email dated 15.09.2025 submitted an undertaking that, *Hindustan Zinc Limited , hereby commit to conduct the technical studies recommended by the Expert Appraisal Committee, MoEF&CC during the 50th EAC meeting held on 15th September, 2025, pertaining to the environmental and safety aspects (related to stability, TSF design, and seepage analysis) of the Tailing Storage Facility at the Rajpura Dariba Lead-Zinc Underground Mine...*

EAC noted the submission of PP and stated that PP shall engage any National Institute of repute within 6 months to conduct environmental and safety studies related to stability, TSF design and seepage analysis of the entire Tailing Storage Facility. Recommendations of the study should be followed by PP. The report prepared by the above National Institute shall be shared with the DGMS also

and recommendations of the DGMS, with regard to safety, if any, should be followed.

PP further submitted an action plan for Being Complied and Agreed to Comply points as per CCR dated 28.04.2025. Upon reviewing the submission of PP, EAC noted that certain conditions such as CGWA NOC for water withdrawal, utilization of waste for filling of voids in stopes, disaster management plan, EMP, quality of polluted water generated during mining operation, rainwater harvesting, measurement of Peak Particle velocity, illumination of ML area, reclamation activity are continual in nature, occupational health monitoring. Whereas there are many statutory conditions that PP will always have to comply. Therefore, EAC advised PP to continue those activities as reported being complied and agreed to comply in the CCR dated 28.04.2025.

Regarding the partially complied condition related to the impact of mining and beneficiation on crop production, PP submitted that to assess the impact of mining and beneficiation plant activities on crop production a study in nearby area was done. As per the study a comparison of crop yield data over five years from four Study area villages and seven outside study area villages showed no significant variation(data sourced from State Agriculture Dept.). The minor marginal variation in Kharif (rainy season) crop production was attributed to changes in rains pattern. During the Rabi (winter) period, crop production remained consistent in the all villages because open dug wells and tube wells were able to sustain yield required for irrigated crops. The tailings from the beneficiation plant are fed to the tailing pond through five pipelines no leaks reported and thus no contamination. The groundwater within the lease area flows towards the south and south-eastern direction, where four villages are located. EAC noted the submission of PP and advised to undertake the study an annual basis and to submit the report of same to Ministry's Regional Office.

A complain vide email dated 15.09.2025 was received from Shri Ratan Lal Gadri alleging that his farmland is situated in close proximity to the tailing dam of the instant project and due to negligence in the maintenance of the dam's drainage system, toxic tailing waste and water have leaked onto his land. Shri Gadri further alleged that the said leakage has caused severe waterlogging and contamination of the soil, rendering the land uncultivable. Shri Gadri has mentioned that the toxic seepage has polluted his well, which is the primary source of irrigation and drinking water, posing a serious health risk to his family and livestock. Accordingly, EAC asked PP to reply to the aforesaid email complain.

PP submitted that the complainant along with his accomplice Shri Kishan Lal Gadri has been involved several times in breaking the pipeline of the tailing dam. PP also mentioned that they have complained against Shri Kisan Lal Gadri on 12.02.2024 in the Railmagra Thana, Rajsamand.

PP also mentioned that in the year 2023, they submitted numerous complaints dated 07.06.2023, 10.06.2023 and 13.06.2023 against Kisan Lal Gadri and his accomplices for damaging of property. PP mentioned that on 21.06.2023, they informed the SHO of Railmagra Thana, District Rajsamand about the damage to property and life from Shri Kishan Gadri S/o Gopu Gadri, Shri Vishnu Jaat, Shri Ratan Gadri S/o Gopi Gadri , Shri Kailash Gadri , Shri Ladu Gadri, Shri Roshan Gadri and others. PP stated that these persons were threatening the officials of Hindustan Zinc Limited regarding stopping of mining operations.

EAC noted the submission of PP and advised PP to approach Local authorities / Police to resolve this issue.

Based on the aforesaid discussions and presentation made by the Project Proponent and the Consultant, the Expert Appraisal Committee (EAC), in its 50th meeting held on 12th & 15th September, 2025, under the provisions of the EIA Notification, 2006 and its subsequent amendments, **recommended** the proposal for the grant of Amendment in Environmental Clearance dated 13.04.2020 for Rajpura Dariba Lead-Zinc Underground Mine (M.L. No. 166/2008 & Area- 1142.2106 Ha) with Production Capacity of 2.0 million TPA (Total Excavation 2.48 million TPA) & Lead Zinc Ore Beneficiation of 2.5 million TPA by M/s Hindustan Zinc located at Tehsil Relmagra, District Rajsamand, Rajasthan along with following additional specific conditions, in addition standard conditions applicable to Non-Coal mining projects given at Annexure (1).