सत्यमेव जयते

File No: SIA/GA/MIN/591079/2026

State Environment Impact Assessment Authority (SEIAA), Goa

(Constituted as per the provision of EIA Notification, 2006, as amended by the Ministry of Environment, Forest and Climate Change, Government of India)

Dated: **03/11/2026**

To,

Raju T. Chavan
MINEIRA NACIONAL LIMITADA
Salgaocar Bhavan, Altinho, Panaji, Goa., Panaji, NORTH GOA, GOA, Salgaocar Bhavan, 403001
mineiranacional@gmail.com

Subject: Grant of EC under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006-regarding in respect of project Handling of Iron Ore dump Situated Outside the Lease Area on Private property at Survey Number 4/1, 4/2, 4/3, 4/4, 4/5(P), 4/6, 4/7(P), 4/8(P), 4/9(P), 4/10(P),4/12(P), 4/13(P), 4/14, 4/15(P), 4/16, 4/18(P) 4/19, 4/20(P), 4/21, 4/23(P), 4/24,4/25(P), 4/26(P), 5/1(P), 5/2(P), 5/3(P), 5/4, 5/5, 5/6(P), 5/7(P), 5/8, 5/9, 5/10, 5/1 1, 5/12, 5/13, 5/14, 5/15(P), 5/16, 5/17 of Santona Village of Sanguem Taluka, Kushavati District, (Erstwhile South Goa Dist) Goa of Mineira Nacional Limitada. submitted to Ministry vide proposal number SIA/GA/MIN/591079/2026 dated 23/09/2026.

2. The particulars of the proposal are as below:

(i) EC Identification No.	EC26C0000GA5783564N
(ii) File No.	SIA/GA/MIN/591079/2026
(iii) Clearance Type	EC
(iv) Category	B2
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Name of Project	Handling of Iron Ore dump Situated Outside the Lease Area on Private property at Survey Number 4/1, 4/2, 4/3, 4/4, 4/5(P), 4/6, 4/7(P), 4/8(P), 4/9(P), 4/10(P),4/12(P), 4/13(P), 4/14, 4/15(P), 4/16, 4/18(P) 4/19, 4/20(P), 4/21, 4/23(P), 4/24,4/25(P), 4/26(P), 5/1(P), 5/2(P), 5/3(P), 5/4, 5/5, 5/6(P), 5/7(P), 5/8, 5/9, 5/10, 5/1 1, 5/12, 5/13, 5/14, 5/15(P), 5/16, 5/17 of Santona Village of Sanguem Taluka, Kushavati District, (Erstwhile South Goa Dist) Goa of Mineira Nacional Limitada.

(vii) Name of Company/Organization	MINEIRA NACIONAL LIMITADA
(viii) Location of Project (District, State)	SOUTH GOA, GOA
(ix) Issuing Authority	SEIAA
(x) Applicability of General Conditions	no
(xi) Applicability of Specific Conditions	no

Copy To

N/A

GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
Constituted by the Ministry of Environment, Forest and Climate Change,
Government of India
C/o Department of Environment and Climate Change
4th Floor, Dempo Towers, Patto Panaji Goa - 403001.
e-mail: goaseac@gmail.com

No: 286/9/2026-27/GSEIAA/Project-Prop/ 185 Date: 03 / 11 /2026

To,
Raju T. Chavan
Mineira Nacional Limitada,
Salgaocar Bhavan, Altinho,
Panaji, Goa- 403001

Sub:- Issuance of Prior Environmental Clearance (EC) to Mineira Nacional Limitada for handling of dump situated outside the Lease Area on private property at Survey Number 4/1, 4/2, 4/3, 4/4, 4/5(P), 4/6, 4/7(P), 4/8(P), 4/9(P), 4/10(P),4/12(P), 4/13(P), 4/14, 4/15(P), 4/16, 4/18(P) 4/19, 4/20(P), 4/21, 4/23(P), 4/24,4/25(P), 4/26(P), 5/1(P), 5/2(P), 5/3(P), 5/4, 5/5, 5/6(P), 5/7(P), 5/8, 5/9, 5/10, 5/1 1, 5/12, 5/13, 5/14, 5/15(P), 5/16, 5/17 of Santona Village of Sanguem Taluka, Kushavati District, (Erstwhile South Goa Dist) Goa.

Sir,

With reference to the above subject matter vis-à-vis your application dated 08/09/2026, along with documents including Form-I, Pre-feasibility report, EMP, mining plans and other documents seeking prior Environmental Clearance (EC) for handling of dump situated outside the Lease Area on private property at Survey Number 4/1, 4/2, 4/3, 4/4, 4/5(P), 4/6, 4/7(P), 4/8(P), 4/9(P), 4/10(P),4/12(P), 4/13(P), 4/14, 4/15(P), 4/16, 4/18(P) 4/19, 4/20(P), 4/21, 4/23(P), 4/24,4/25(P), 4/26(P), 5/1(P), 5/2(P), 5/3(P), 5/4, 5/5, 5/6(P), 5/7(P), 5/8, 5/9, 5/10, 5/11, 5/12, 5/13, 5/14, 5/15(P), 5/16, 5/17 of Santona Village of

Sanguem Taluka, Kushavati District, (Erstwhile South Goa Dist) Goa over an area of 12.1854 Ha with extraction capacity of 2.0 MTPA.

Accordingly, the said proposal has been categorized as 'Category-B' and screened as 'Category 1(a)-B2 project': Mining of minerals as per the 'Schedule' annexed to the Environment Impact Assessment (EIA) Notification 2006, (as amended till date).

The Goa State Expert Appraisal Committee *("Goa-SEAC")* in its 299th meeting held on 16th October 2026 decided to recommend the said proposal to the Authority for grant of Environmental Clearance under the provision of EIA Notification 2006 (as amended).

Further, the Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its 202nd Goa-SEIAA meeting held on 28/10/2026 decided to grant Environmental Clearance with the mandatory compliances & subject to the following conditions under the provision of EIA Notification 2006 (as amended) till date.

The details of the project submitted by the Project Proponent

Sr. No.	Items	Details
1.	Name of the Project/s	Handling of Iron ore dump situated on private property Survey No. 4(P) & 5(P) in Santona Village of Sanguem Taluka, Kushavati District, (Erstwhile South Goa) Goa.
2.	Name of the applicant	Mineira Nacional Limitada, Salgaocar Bhavan, Altinho, Panaji Goa, 403001
3.	Type of quarry	Handling of Iron Ore Dump
4.	Sr. No. in the Schedule	1(a) Mining of minerals
5.	New/Expansion/Modernization/	New

<table>
<tr><td></td><td>renewal</td><td></td></tr>
<tr><td>6.</td><td>Existing Capacity/lease Area etc.</td><td>12.1854 Ha. (Dump lease area)</td></tr>
<tr><td>7.</td><td>Extraction Capacity</td><td>2.0 MTPA</td></tr>
<tr><td>8.</td><td>Category of Project i.e. ‘A’ or ‘B’</td><td>B2</td></tr>
<tr><td>9.</td><td>Plot/Survey/Khasra No.</td><td>4/1, 4/2, 4/3, 4/4, 4/5(P), 4/6, 4/7(P), 4/8(P), 4/9(P), 4/10(P),4/12(P), 4/13(P), 4/14, 4/15(P), 4/16, 4/18(P) 4/19, 4/20(P), 4/21, 4/23(P), 4/24,4/25(P), 4/26(P), 5/1(P), 5/2(P), 5/3(P), 5/4, 5/5, 5/6(P), 5/7(P), 5/8, 5/9, 5/10, 5/11, 5/12, 5/13, 5/14, 5/15(P), 5/16, 5/17</td></tr>
<tr><td>10.</td><td>Village</td><td>Santona</td></tr>
<tr><td>11.</td><td>Taluka</td><td>Sanguem</td></tr>
<tr><td>12.</td><td>District</td><td>Kushavati (Erstwhile South Goa)</td></tr>
<tr><td>13.</td><td>State</td><td>Goa</td></tr>
<tr><td>14.</td><td>Nearest railway station/airport, public facility from site (public dwelling, school, educational institution, hospital, Dam)</td><td>
<table>
<tr><th>Particulars</th><th>Details</th><th>Approximate Distance</th></tr>
<tr><td rowspan="2">Railway station</td><td>Kalay</td><td>4.1 km</td></tr>
<tr><td>Sanvordem</td><td>10.0 km</td></tr>
<tr><td>Hospital</td><td>Community Health Centre, Curchorem</td><td>10.5 km</td></tr>
<tr><td>Airport</td><td>Goa</td><td>33 km</td></tr>
</table>
</td></tr>
</table>

			International Airport, Dabolim	
		Nearest Highway	NH 748	7.3 km
		Nearest Habitation	Bandoli	0.40 km
		Dam	Moissal Dam	4.0 km
		River	Kalay River	1.3 km
15.	Area to be excavated	Entire 12.1854 Ha. is covered by Dump proposed to be handled.		
16.	Balance area available	Entire 12.1854 Ha. is covered by Dump proposed to be handled.		

<table>
<tr><td>17.</td><td>Existing flora and fauna at site with details of species and nos of trees</td><td>There are around 1205 number of trees present at within the dump site. The details are as below
<table>
<tr><th>Species</th><th>Number of Trees</th></tr>
<tr><td>Acacia auriculiformis A.Cunn. ex Benth.</td><td rowspan="2">998</td></tr>
<tr><td>Acacia mangium Willd.</td></tr>
<tr><td>Casuarina sp.</td><td>182</td></tr>
<tr><td>Macaranga peltata (Roxb.) Müll.Arg.</td><td>20</td></tr>
<tr><td>Trema orientale (L.) Blume</td><td>5</td></tr>
</table></td></tr>
<tr><td>18.</td><td>Tree plantation proposed species and number</td><td>It is proposed to plant around 30,500 trees during five years as below
<table>
<tr><th>Year of operation</th><th>Number of Trees proposed for plantation</th><th>Species</th></tr>
<tr><td>1st Year</td><td>500</td><td rowspan="5">Local and fruit bearing plants such as Jamun, Amla, Cashew,</td></tr>
<tr><td>2nd Year</td><td>1500</td></tr>
<tr><td>3rd Year</td><td>1500</td></tr>
<tr><td>4th Year</td><td>7000</td></tr>
<tr><td>5th Year</td><td>20000</td></tr>
</table></td></tr>
</table>

				Mango, Kokam etc. will be planted.
19.	Approached road	All weathered tarred approach road connecting project area to State Highway-7. (Mollem to Sanvordem Tisk)		
20.	Proposed / Existing Road Paved / unpaved with length of road	All weathered tarred approach road connecting project area to State Highway-7 is available (Mollem to Sanvordem Tisk). The road is tarred upto State highway with a distance of about 1 km.		
21.	Distance from nearest Locality	0.40 km- Bandoli Village		
22.	Distance from nearest metallic road	0.3 km from the boundary of the dump		
23.	Distance from nearest water body	1.3 km Kalay River		
24.	Whether site has existing water body	No		
25.	Distance from wild life sanctuary	2.2 km Bhagwan Mahaveer Wildlife Sanctuary & National Park		
26.	Distance from Ecological Sensitive Area/zone boundary	1.2 km ESZ of Bhagwan Mahaveer Wildlife Sanctuary & National Park		

I. Statutory Compliance

i. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

ii. The Project Proponent (PP) is under obligation to implement commitments made in the Environment Management Plan, which forms part of this Environment Clearance.

iii. 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 must display the same for 30 days from the date of receipt.

iv. The Project Proponent shall have a well laid down Environmental Policy duly approved by the Board of Directors (in case of Company) or Competent Authority, duly prescribing 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.

v. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the Project Proponent (during operational phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for

any other purpose. Six monthly progress of implementation of action plan shall be reported to the Authority/Ministry/Regional Office along with the Six-Monthly Compliance Report.

vi. 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.

vii. The Authority/Regional Office of this MoEF&CC shall monitor compliance of the stipulated conditions. The project Authorities should extend full cooperation to the Officer (s) by furnishing the requisite data /information/monitoring reports.

viii. 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.

ix. The Project Proponent shall follow the Government of Goa dump policy, dated September 13, 2023 for setting the ceiling limit of 25 million tons per annum for dump transportation.

x. The Project Proponent should adopt the proper mitigation measures as proposed under EMP. The adoption of mitigation measures and monitoring of the same as proposed in the EMP shall be done under the supervision of the qualified environmental personnel. The implementation status of the same shall be submitted to this Authority/Ministry's Regional Office.

xi. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.

xii. 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.

xiii. 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 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".

xiv. The 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/ Mamlatdar's Office for 30 days.

xv. The Project Proponent 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 Authority/MoEFCC Regional Office for compliance and record.

xvi. The Project Proponent shall inform this Authority for any change in ownership of the lease. In case there is any change in ownership or transferred then the 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.

xvii. 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.

xviii. This Authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

II. <u>Air Quality Monitoring and preservation</u>

i. The PP shall install a minimum of 2 (two) online ambient Air Quality Monitoring Stations with 1 (one) in upwind and 1 (one) in downwind direction based on long term climatological data about wind direction such that an angle of 120 deg 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 3 months in front of the main gate of the dump site.

ii. The PP to monitor Ambient Air Quality along the transport route and at the dump site and the results of such monitoring to be displayed electronically in

front of the main entry and exit gate. The location of the same shall be in consultation with GSPCB.

iii. 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 PM2.5are 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/ State Pollution Control Board.

iv. Online sensor based Air Monitoring Stations be installed along the transportation routes in consultation with GSPCB and integrated with server of GSPCB and software of DMG.

v. The Project Proponent shall carry out monitoring of Air and Water parameters on routine basis through MoEFCC recognized or NABL certified agencies.

vi. The PP needs to regularly spray with water to arrest the generation of dust on the haul roads within the dumping area. The main haul road adjacent to dump site should be provided with water tankers for the dust suppression.

vii. Fugitive dust monitoring during transportation shall be monitored regularly at all the sensitive receptors and report shall be submitted quarterly to this Authority/ Regional Office.

viii. The Project Proponent shall adhere to the pollution control measures suggested by the State/Central Pollution Control Board in the environmental guidelines for crushing/screening activity.

ix. Dust suppression plan must be in place, covering both within and outside along the roads passing through the villages. Drivers must be trained both on traffic and environmental safeguards. Speed governors must be fitted to the trucks. Speed must not exceed 40 kms per hour as most of the roads leading to the jetties are passing through the villages.

x. The Project Proponent to explore the possibility of using atleast 20% Green Energy Vehicles for the transportation of ore.

III. <u>Water Quality Monitoring and preservation</u>

i. The 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 WRD / State Groundwater Department. A report on amount of water recharged needs to be submitted to this Authority annually.

ii. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to this Authority/ Regional Office of the MoEF&CC and the State Pollution Control Board/Committee.

iii. The Project Proponent must ensure that the silt and mine water does not flow into the agricultural lands which have been revived and are being cultivated by the locals. Adequate measure must be in place to prevent any such

incidences. Efforts must be made to support agriculture practices, wherever possible on a proactive basis.

iv. Quality of the polluted water generated from dump operations (extraction) which include Chemical Oxygen Demand (COD) in dump site run-off; acid mine drainage and mental contamination in run-off 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.

IV. Noise and vibration monitoring and prevention

i. 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 PPE's (Personal Protective Equipments) 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.

V. Dump Handling plan

i. The PP shall make Progressive Mine Closure Plan and within 2 months a copy of the plan shall be submitted to this Authority for record and verification.

ii. The PP shall, after ceasing dump operations shall carry out restoration/ reclamation as per the statutory guidelines of Central Government in consultation with State Government.

VI. Land reclamation

i. In pursuant to Ministry's O.M. No. 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the lease holder shall after ceasing dumping operations, undertake regrassing the dump area and any other area which may have been disturbed due to other activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

ii. 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.

iii. Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the dump site, 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 dump area, roads, green belt development, plantation etc. The drains/sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

iv. Check dams of appropriate size, gradient and length shall be constructed around dump site 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.

v. The ecology restoration or mine reclamation activities should be as per the plan submitted to this Authority.

vi. The waste dump slopes shall be covered with biodegradable geotextile mats to prevent the soil erosion of the dump slopes so as to facilitate the growth of native species.

vii. The project proponent must ensure that the socio-cultural including the religious sentiments of the surrounding villagers do not hamper due to unwanted restrictions.

viii. The PP shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to this Authority. (If applicable)

VII. Transportation

i. The Project Proponent shall abide by all the Circulars, Office Memorandum, Orders issued by the Directorate of Mines and Geology on transportation of Ore and Minerals.

VIII. Green Belt

i. The PP shall develop greenbelt in 7.5m wide safety zone all along the dump lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from dumping operations within the lease. The whole green belt shall be developed prior to closure of mining operation.

ii. The Plantation programme to be carried out as per the dump policy.

iii. PP should plant grasses/vegetation to check the surface runoff.

iv. Extensive native species / fruit bearing plantation shall be carried out in all safety zones 7.5m wide with density of 2500 trees/ha **[12.1854 Ha (Dump Area) X 2500 Trees= 30,464 trees to be planted]**. Also, 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.

v. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:3 i.e. planting of 3 trees for every 1 tree that is cut shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

vi. The Project Proponent needs to complete the entire peripheral plantation, safety barrier plantation and gap plantation under green belt before closure of dumping operations. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants the seedlings should have proper root stock with root biomass commensurate with seedling height to ensure good growth after plantation. Plantation shall be undertaken in consultation with the State Forest Department/ Bio Diversity Board. The Project Proponent shall make the actual count on the saplings planted and continuously monitored its survival rate. In case of failure to achieve 80% survival rate, action plan for achieving the target survival rate shall be submitted to this Authority/ Ministry's Regional Office.

vii. The PP shall be responsible to develop Green Belt, plantation for ecology restoration by planting native species and also involving local community.

viii. To protect and enhance biodiversity of the mine and surrounding areas, the project proponent may collaborate with local Biodiversity Management Committees (BMC) in developing biodiversity parks, nurseries etc.

ix. Efforts need to be made to identify wildlife movement corridors based on the historical data within the mine site and take corrective measures, if any.

IX. Human Health issues

i. The PP shall appoint an Occupational Health Specialist for regular as well as periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carry out Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking etc. the check-ups shall

be undertaken once in 6 months and necessary remedial/ preventive measures be taken. The status report on the same to be sent to SEIAA and DGMS on half yearly basis.

ii. The PP shall comply/ implement with all action plans made during Goa-SEIAA meeting and make regular maintenance and record the progressive activity outcomes. The Project Proponent shall ensure that the activities proposed by the Authority under CER activities to be complied.

iii. The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.

X. <u>Corporate Environmental Responsibility (CER)</u>

i. As per the Office Memorandum issued by the Ministry 25.02.2021 the PP (where the public hearing is not involved) will be bound to take up all activities proposed in the EIA as well as additional activities that may either be committed by the PP before SEAC/SEIAA or the same prescribed by the SEAC/SEIAA.

ii. Support the locals in alternative livelihoods development by promoting capacity building etc.

iii. Certain amount of funds to be allocated for the safety of the villages due to dump operations.

XI. Miscellaneous

i. The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

ii. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the SEIAA.

iii. The Project Proponent should inform to this Authority/Regional Office regarding date of financial closures and final approval of the project by the Concerned Authorities and the date of start of land development work.

iv. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to this Authority & its Concerned Regional Office, and the State Pollution Control Board.

v. 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 this Authority.

vi. This Authority shall randomly monitor compliance of the stipulated conditions in the Environmental Clearance.

XII. <u>Site Specific Conditions</u>

i. A minimum buffer zone of 50 meters or more from any habitation shall be maintained as a mandatory requirement, in compliance with the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 (as amended till date).

ii. As far as possible there shall be no spillage of ore on the roads, vehicle shall not be driven outside the road (shoulders) in order to control the dust pollution and the ore to be transported should be covered by proper tarpaulin sheets (250 GSM or more) to avoid the spillage.

iii. The PP to explore the possibility of replacing the existing trucks with EV trucks in a phased manner in consultation with the stake holders/ truck owners.

iv. The PP shall ensure that upon loading of trucks, rumblers shall be provided for 3-4 meters on the road and thereafter provide a wheel washing facility at the jetty.

v. The Project Proponent needs to provide proper settling pond considering the annual rainfall to prevent silt/ muddy water from entering into nearby water bodies.

vi. The Project Proponent shall conduct a detailed study of the water quality in the wells existing within 2 km of the periphery of the dump and submit a report to this Authority.

vii. Prior to cutting of any trees, the Project Proponent shall take necessary permission from the concerned Authority. Further, as agreed by the PP, a

compensatory plantation shall be undertaken for plantation outside the lease area in the ratio of 1:10 ensuring 80% survival rate.

viii. The vehicle transporting the ore should not be parked on the road, (utilized by public), allowing the flow of traffic on the remaining part of the road during break hours unless during the unavoidable circumstances.

ix. PP shall ensure that there is no spillage of ore, while transferring the same from the trucks to the barges/rail wagon/ ships etc.

x. Wherever possible the PP should carry out the plantation of native trees along the transport route in consultation with Biodiversity Board/Committee or Forest Department.

xi. As far as possible the width of the road utilized for the transportation of the Ore should be approximately 7.5 mtr.

xii. At the jetty, during the loading / unloading activity the distance between the barges and the hoppers to be minimized to the extent possible to prevent spillage of the ore in the water bodies.

xiii. As directed by the Hon'ble High Court of Bombay for the transportation of the ore from the source to the jetty the SOP stipulated by GSPCB strictly to followed by the PP.

i. The transporter will first approach the Directorate of Mines and Geology for approval of the route of transportation.

ii. In their application they shall indicate the approximate width of the road and facts about number of houses along the route and availability of alternate route.

iii. The Directorate of Mines and Geology will examine the applications and decide upon the route to be allowed for transportation.

iv. Upon such approval, the transporter will apply to the GSPCB for setting up monitoring stations on the route.

v. After the GSPCB sets up the stations, the transporter upon receiving transit permit shall ensure that all conditions of transportation are adhered and complied.

vi. All trucks shall be registered with the Department and fitted with GPS.

vii. GEL shall continuously monitor vehicle spewed and any violation (above 40 km/hr) shall entail penalty i.e. trucks shall be blocked for 3 days and further as per the Order dated 26/04/2016.

viii. Intimation about permitted transport shall be made to SP North, SP South and SP Traffic, informing them that transporter has to strictly follow the Goa (Prevention) of Illegal Mining, Storage.

xiv. **Validity of the Environmental Clearance (EC) accorded shall be for a period of five years and restoration/ rejuvenation/ reclamation of the dump site has to be carried out within the validity period of the EC. In the event that the Project Proponent is unable to complete the activity within the stipulated period, the PP may approach this Authority for extension in validity of EC provided it is within the validity period of EC.**

xv. PP shall ensure that topsoil as well as the overburden removed during dump operations is properly managed and utilized for plantation during restoration/ reclamation.

xvi. PP to undertake measures to minimize the impacts of dump operations on flora and fauna, including specific indigenous species and impacts on agricultural land.

xvii. PP to submit the impact on the environment by aerial photography of pre and

post dump operations of the proposed site from time to time, annually for posterity purposes.

xviii. The number of trips shall be restricted to 70 trips per hour, subject to review and modification by this Authority, as may be deemed necessary, based on future traffic conditions and the traffic assessment at the concerned location.

XIII. PP to further directed to comply with all the conditions as imposed by the Goa State Pollution Control Board:

CONDITIONS REQUIRED TO BE COMPLIED UNDER THE WATER ACT:

i. Workshop effluent

The unit shall operate and maintain Oil and Grease Trap for the effluent generated from the Workshop and ensure that the same meets the General Standard for Discharge of Environmental Pollutants Part A notified under the Schedule VI of the Environment (Protection) Act, 1986.

ii. Domestic Effluent treatment and Disposal: -

The domestic wastewater generated from various locations from the mine shall be treated in a properly designed septic tank and discharged on land for percolation through soak pit of adequate size within the unit premises.

iii. During monsoon, rain water runoff should be diverted into the mining pits and settling ponds.

iv. To prevent siltation of rivers/ nallahs/ fields catch drains, toe wall, filter bed, check dam, garland drains, arrest wall, silt traps and siltation/settling ponds shall be maintained around reject dumps for settlement of suspended particles and to prevent siltation.

v. The unit shall provide rumblers/cattle trap of appropriate size/wheel washing system etc in a proper sequence to prevent dust pollution at all the exit points of the mine and prior to entering the public road.

vi. The rain accumulated mining pit water should be routed through settling ponds and filter beds and meets the standards as below and results shall be submitted to the Board office in the event of discharge before the 15th of every month:

pH	Between	5.5 & 9.0
Suspended Solids (non-rainy day	Not to exceed	50 mg/l
Suspended Solids (rainy day)	Not to exceed	100 mg/l
Iron	Not to exceed	3 mg/l
Manganese	Not to exceed	2 mg/l
Oil & Grease	Not to exceed	10 mg/l

vii. Water Quality Monitoring locations shall be established along with the Board Officials for regular monitoring of ground water level and quality & surface water quality should be carried out monthly through NABL/MoEF&CC accredited laboratory in all seasons and the results have to be submitted to the Board office by the 15th of every month.

viii. The mining unit should maintain the pumping schedule for pumping the rain accumulated water from the mining pit.

NON-HAZARDOUS SOLID WASTE:

i. All the Solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board.

CONDITIONS STIPULATED UNDER AIR ACT:

i. Stack heights for a (Diesel generator set(s) shall be as follows:

(a) Diesel Generator set(s): The minimum height of the stack to be provided with each generator shall be as per the formula H = h + 0.2$\sqrt{KVA}$ where H = total height of the stack in meters, h = height of the building in meters where the generators is installed and KVA = total generator capacity of the set in KVA.

The generator shall be installed in a closed area with a silencer and suitable noise absorption systems so as to comply with the ambient noise level standards as mentioned below:

The ambient noise level shall not exceed 75 dB (A) at a distance of 5 meters from the source.

ii. The Stack Port Hole and Platform for DG sets is to be designed as per CPCB guidelines Method 1 Part 1 of Stack Monitoring – Material & methodology for isokinetic sampling.

iii. The unit should comply with all the standards for D.G. Sets prescribed at Sr. no. 94, 95 and 96 of Schedule I of the Environment (Protection) Rules, 1986.

iv. The unit should carry out emission monitoring from the stacks of DG sets once every year from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and the result shall be submitted to this Board by the 15th of subsequent month.

ix. Ambient Air Quality Monitoring stations should be established along with the Board Officials in the buffer zone for monitoring Particulate Matter, PM10, PM2.5, NOx and SO2. The frequency of manual ambient air quality monitoring should be twice a week and shall be carried out from a laboratory recognized by Ministry of Environment, Forest & Climate Change under the Environment Protection Act, 1986 and manual monitoring reports shall be submitted regularly to the Board office by the 15th of every month.

x. Applicant shall achieve following Quality fugitive emission standards in the core zone:

Fugitive Emission Standards	
Particulate matter	1200 µg/m³
Fugitive emission shall be monitored in the predominant downwind direction at a distance 25.0 ±2.0 meters from the source of fugitive emission as per the following	
Area	Monitoring location
Mine face/ benches	Drilling, excavation and loading applicable for operating benches above water table
Haul roads / service roads	Haul roads to ore processing plant, waste dumps and loading areas and service road
Crushing plant	Run-off mine unloading at hopper, crushing areas, screens and transfer points
Screening plant	Screens, conveying and transportation of ore discharge points Ore storage & loading Intermediate stock bin/ pile areas, ore stock bin/ pile areas, wagon/ truck loading areas
Ore Storage & loading	Intermediate stock bin/ pile areas, ore stock bin/ pile areas, wagon/ truck loading areas
Waste dump	Active waste/ reject dumps

The monitoring standards in Buffer zone would be as per the table below:

SO_2	Not to Exceed (Annual Average)	50 µg/ m^3
	Not to Exceed (24 hours)	80 µg/ m^3
NOx	Not to Exceed (Annual Average)	40 µg/ m^3
	Not to Exceed (24 hours)	80 µg/ m^3
PM_{10}	Not to Exceed (Annual Average)	60 µg/ m^3
	Not to Exceed (24 hours)	100 µg/ m^3
$PM_{2.5}$	Not to Exceed (Annual Average)	40 µg/ m^3
	Not to Exceed (24 hours)	60 µg/ m^3

All other parameters should meet the standards specified in NAAQS notification dated 18th November 2009 for the relevant industry.

ii. The PP shall install a minimum of 3 (three) ambient Air Quality Monitoring Stations in core zone with 1 (one) in upwind and 2 (two) in 4 downwind direction based on long term climatological data about wind direction such that an angle of 120 deg is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, N02, CO, and S02 etc. as per the methodology mentioned in NAAQS Notification No. B 2901620/90/PC1/1, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. One of the locations towards downwind direction shall be online station which is in close vicinity to nearest settlement/habitations. 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.

iii. The unit shall install CCTV Camera at all the exit gates from unit towards the jetty to monitor if the trucks are properly covered with tarpaulin before exitfrom mine during transportation of ore.

iv. The roads within the premises of the unit shall be sprinkled with water to suppress dust pollution.

v. Water sprinkling must be carry out all along the transport route to prevent fugitive dust emissions.

vi. Spillage of ore on the public roads shall be removed immediately on occurrence.

vii. The trucks/tippers engaged in transportation of ore shall have with at least six inches free board after filling the cargo box to avoid spillage.

viii. All trucks/ tippers engaged in the transportation of ore shall be covered with tarpaulin and the tarpaulin shall be properly fastened to the cargo box to ensure the ore does not get air borne or spill on the road.

ix. The unit shall provide road sweeping machine for cleaning the public road.

x. The mining company should submit details regarding transportation of ore in the following format every month

xi. The Establishment is required to strictly comply with the provisions of the Noise (Regulation and Control) Rules, 2000 as below;

xii. The unit shall take adequate measures for control of noise levels from its own source within the premises in respect of noise.

GENERAL CONDITIONS:

i. The unit has to obtain no objection certificate from the Central Ground water Authority, or the concerned state authority for any ground water abstraction, if applicable.

ii. Effective safeguard measures for prevention of dust generation and subsequent suppression shall be carried out in areas prone to air pollution where in high levels of PM10and PM2.5 are evident such as haul road loading and unloading point and transfer point. The fugitive dust emissions from all sources shall be regularly controlled by installation of required machinery and preventive maintenance.

iii. There should be shoulders/small pillars on both side of the road so that the running trucks so not ply over the soil lying on the road side.

iv. Effective safeguard measures for prevention of dust generation and subsequent suppression shall be carried out in areas prone to air pollution where in high levels of PM10and PM2.5 are evident such as haul road loading and unloading point and transfer point. The fugitive dust emissions from all sources shall be regularly controlled by installation of required machinery and preventive maintenance.

v. Trees shall be planted and maintained around the plant in an area of the premises of the unit. Green belt development shall be started along with the construction activity.

vi. The applicant shall provide facilities for collection of the samples to the Board staff.

vii. Proper garland drains should be maintained to prevent direct runoff from the mine to the nearby agricultural field and river.

viii. The unit shall apply for Consent to Operate of the Board as required under section 25(1) (b & c) of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and 6 Control of Pollution)

Act, 1981 in the prescribed application form, 60 days before commissioning of the unit.

ix. The unit should provide sweeping arrangements for sweeping of roads affected due to transportation of iron ore. The unit shall regularly spray water to arrest the generation of dust on the haul roads within the dump area. The main haul road and public road should be provided with water tankers of adequate capacity for dust suppression. Dust suppression plan must be in place, covering both within and outside the premises of unit especially along the roads passing through the villages.

x. Installation/operation of any processing/screening equipment/machinery must not be done without the prior consent of the Board.

xi. Wherever habitations are within the lease boundary or nearby to lease boundary at least one Ambient Air Quality Monitoring Station has to be installed near to the habitation.

xii. The Jetties and stacking plots shall have valid Consent to operate from the Board prior to starting the transportation of ore.

xiii. The unit should obtain permission from the Forest Department/ Wild Life Board wherever applicable.

xiv. The unit shall install an online noise monitoring station having specification as below at the boundary of the unit in consultation with the Board and connect the same to the board's server. a) Certified by IEC 61672-1 (2013) CLASS 1 Standards b) Class 1 Type for Omni directional c) Dynamic Span-120dB or more (20 140dB) A/C d) Data measurement-Leq(A)dB, Lmax, Lmin, Lpeak, L10,L50 & L90 e) The system should comply with testing/calibration protocol as per International Standards and of the central pollution Control Board. f) The

system should comply with Circulars issued by the Board vide no 3/71/23 PCB/LAB/20651 dated 21/12/2023 and 3/71/23-PCB/lab/3884 dated 23/05/2024.

Yours faithfully,

(Sachin S. Desai)
Director, (Environment),
Member Secretary, Goa-SEIAA

****

Copy for favour of information to:

a) **The Collector,** South Goa District, Margao-Goa.
b) **P.A. to Secretary (Environment),** Secretariat, Porvorim,Goa.
c) **P.S. to Additional Secretary**, Ministry of Environment & Forests (MoEF), Paryavaran Bhavan, C.G.O. Complex, Lodhi Road, New Delhi - 110510
d) **The Chairman,** Goa-State Environment Impact Assessment Authority.
e) **The Chairman,** Goa-State Expert Appraisal Committee.
f) **The Director, Directorate of Mines and Geology**, Institute Menezes Braganza, Panaji Goa
g) **Member Secretary,** Goa State Pollution Control Board (GSPCB), Opp Saligao Seminary, Saligao, Bardez, Goa.
h) **Integrated Regional office Kendriya Sadan**, 4th Floor, E & F Wings, 17th main road, II Block, Koramangala, Bangalore-560034.

Signature Not Verified
Digitally Signed by : Shri Sachin Desai
Member Secretary, SEIAA
Date: 04/11/2026