



सत्यमेव जयते

File No.: IA-J-11015/150/2018-IA-II(NCM)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 02/07/2024



To,

Shri Chirag Shah
M/s GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED
KHANIJ BHAVAN 132 FEET RING ROAD NEAR UNIVERSITY RING ROAD VASTRAPUR
AHMEDABAD , AHMADABAD, GUJARAT, HELMET CROSS ROAD, 380052
env@gmdcltd.com

Subject: Mothala Balachod Bauxite Mining Project with the Production Capacity of 42,000 TPA in the mine lease area of 280.7686 Ha by M/s Gujarat Mineral Development Corporation Limited, located at Villages Balachod, Mothala, Khandai, Tehsil Abdasa, District Kutch, Gujarat- Environmental Clearance under MoEF&CC Notification S.O.1530(E) dated 6th April 2018 reg.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/GJ/MIN/448536/2023 dated 18/11/2023 for grant of 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.	EC23A0000GJ5514063N
(ii) File No.	IA-J-11015/150/2018-IA-II(NCM)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Sector	Non-Coal Mining Regularization of existing EC under the provision of EIA Notification 2006 and in compliance of MoEF&CC Notification S.O.1530(E) dated 6th April 2018 for Mothala Balachod Bauxite Mining Project in the Mine Lease Area – 280.7686 Ha with the Production Capacity 42000 TPA of M/s Gujarat Mineral Development Corporation Limited located at Village –Balachod, Mothala, Khandai, Tehsil Abdasa, District - Kutch, Gujarat
(vii) Name of Project	

(ix) Location of Project (District, State)	KACHCHH, GUJARAT
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	No

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 EAC under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by EAC in the meeting held on 09/05/2024. 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.

6. The EAC, in its meeting held on 09/05/2024, based on information submitted viz: Form 1 (Part A, B and C), EIA/EMP report etc & clarifications provided by the project proponent and after detailed deliberations on all technical aspects, recommended the proposal for grant of Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of Specific and Standard EC conditions as detailed in Annexure (1) and Annexure (2). The details of the project along with observation and recommendation of EAC as per approved minutes is given at Annexure (3)

7. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the EAC hereby accords Environment Clearance for Mothala Balachod Bauxite Mining Project in the Mine Lease Area – 280.7686 Ha with the Production Capacity 42000 TPA to M/s. Gujarat Mineral Development Corporation Limited under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of the Specific and Standard EC conditions as given in Annexure (1) and Annexure (2).

8. The Ministry reserves the right to stipulate additional conditions, if found necessary.

9. 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.

10. The PP is under obligation to implement commitments made in the Environment Management Plan,

11. General Instructions:

- I. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC website where it is displayed.
- II. 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.
- III. 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.
- IV. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction 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 Ministry/Regional Office along with the Six-Monthly Compliance Report.
- V. 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.
- VI. The Regional Office of this MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

VII. 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. This issue with an 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 Environment, Government of Gujarat, Gujarat.
3. **The Secretary**, Department of Mines and Geology, Government of Gujarat, Gujarat.
4. **The Secretary**, Department of Forests, Government of Gujarat, Gujarat.
5. **The Chief Wildlife Warden**, Government of Gujarat, Gujarat.
6. **The Deputy Director General of Forests (C)**, Ministry of Environment, Forest and Climate Change, Regional Office, Gandhi Nagar, A-Wing – 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar – 382010.
7. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
8. **The Chairman**, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector-10A, Gandhinagar-382 010, Gujarat.
9. **The Controller General**, Indian Bureau of Mines, Indira Bhawan, Civil Lines, Nagpur-440001.
10. **The Member Secretary**, Central Ground Water Board, Ministry of Agriculture and Irrigation, 12/1 Jam Nagar House, Shahjahan road, New Delhi-110011.
11. **The District Collector**, Kachchh District, Govt. of Gujarat.
12. **Guard File.**
13. **PARIVESH Portal.**

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Continuous Ambient Air Quality Monitoring Stations

S. No	EC Conditions
1.1	The Project Proponent should install the Continuous Ambient Air Quality Monitoring Stations in such numbers as per the scientific study and in consultation with CPCB.

2. Real Time Data

S. No	EC Conditions
2.1	The real time data generated by continuous ambient air quality monitoring stations (CAAQMS) should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.

3. Transportation Of Mineral

S. No	EC Conditions
3.1	The Project Proponent should implement the budget of Rs 53.5 Lakhs as Capital cost and Rs. 29.40 Lakhs as recurring cost towards Environment Management Plan (EMP) within 3 years. The Project Proponent needs to submit the six-monthly report upon the progressive status of transportation of mineral through Rail and Road.

4. Movement Of Wildlife

S. No	EC Conditions
4.1	The Project Proponent shall strictly adhere to the action plan to monitor the movement of wildlife in the vicinity of the mine lease area.

5. Camera Traps

S. No	EC Conditions
5.1	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 minimise stress conditions for wild animals and to avoid Man Animal conflict.

6. Annual Compliance

S. No	EC Conditions
6.1	The Project Proponent needs to submit the annual compliance of the effectiveness of the Wildlife Conservation Plan from the Forest Department and submit it to the Regional Office of the Ministry.

7. Monitoring On Surface Water

S. No	EC Conditions
7.1	Regular monitoring on surface water flow, turbidity & water quality shall be carried out and report shall be submitted quarterly to the Ministry's Integrated Regional Office.

8. Monitor The Air Quality

S. No	EC Conditions
8.1	The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Integrated Regional Office.

9. Garland Drains

S. No	EC Conditions
9.1	Garland drains and catch drains shall be regularly desilted and maintained periodically at regular intervals.

10. Periodically Monitor

S. No	EC Conditions
10.1	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.

11. Water Sprinklers

S. No	EC Conditions
11.1	The Project Proponent needs to install the permanent water sprinklers along the haul road and the approach road. Further, 10 nos. of fog canon/mist sprayer of at least 40 m throw shall be installed at various locations in the mine area.

12. Electric Vehicles/cng/solar

S. No	EC Conditions
12.1	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.

13. Third Party Audit

S. No	EC Conditions
13.1	The Project Proponent shall conduct third party audit of compliance of EC condition at an interval one year and its report shall be submitted to IRO, MoEF&CC.

14. Gap Plantation

S. No	EC Conditions
14.1	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 Regional Office. Project proponent shall use saplings of 10 ft height for plantation. PP shall make provision for drip irrigation to conserve the

S. No	EC Conditions
	water.

15. Ro Drinking Water

S. No	EC Conditions
15.1	The Project Proponent needs to provide the RO drinking water supply and also by laying network of pipelines to the local people at free of cost.

16. Rainwater Harvesting Structure

S. No	EC Conditions
16.1	The Project Proponent shall provide the rainwater harvesting structure at mine office and quarters to recharge the ground water.

17. Monitor And Maintain The Health Records

S. No	EC Conditions
17.1	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 shall be carried through regular occupational health check-up 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.
17.2	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 Silicosis shall be carried through regular occupational health check-up every year for mine workers.

18. Cgwa/sgwa

S. No	EC Conditions
18.1	Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable.

19. Clearances/permissions

S. No	EC Conditions
19.1	Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.

20. Protection And Management

S. No	EC Conditions
20.1	The Project Proponent shall ensure that the protection and management of the water bodies should include provision of utilizing available water to the villagers by installing solar pumps as well as project proponent shall explore the possibility for installing floating solar panels for generation of electricity and distribution of power supply to the villagers.

21. Monitoring Station

S. No	EC Conditions
21.1	The Project Proponent shall install the adequate number of monitoring station to undertake air quality and water quality monitoring in the vicinity of 5 km of the mine and water bodies and the six monthly data should be submitted to the Ministry.

22. Environment Laboratory

S. No	EC Conditions
22.1	The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories/consultants. Any non-compliance or infringement should be reported to the concerned authority.

23. Water Treatment

S. No	EC Conditions
23.1	The Project Proponent needs established water treatment facility for the drinking purposes within the ML area and submission of six-monthly report including the relevant photographs.

24. Ground Water

S. No	EC Conditions
24.1	The Project Proponent needs to conduct the study w.r.t. the impact of mining upon Ground water for identifying status of PH and other parameters of ground water and submit a report to the RO, MoEF&CC within six-month.

25. Employment-based Apprenticeship

S. No	EC Conditions
25.1	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

S. No	EC Conditions
	and improved accordingly.

26. Clean Energy

S. No	EC Conditions
26.1	The Project Proponent should explore the possibility for shifting to clean energy using electric equipment for cleaner production options to reduce the emission generated from various machineries.

27. Mitigation Measures

S. No	EC Conditions
27.1	All the mitigation measures committed / envisaged in the EIA/EMP report and subsequent submission shall be implemented.

28. Single Use Plastic (Sup)

S. No	EC Conditions
28.1	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

29. Regrassing The Mining Area

S. No	EC Conditions
29.1	The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.

STANDARD EC CONDITIONS FOR MINING OF MINERALS

I. Statutory compliance

- 1) 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.
- 2) 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.
- 3) 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.
- 4) 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".
- 5) 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.
- 6) 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.
- 7) 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.
- 8) 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.

II. Air quality monitoring and preservation

9) 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.

10) 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.

III. Water quality monitoring and preservation

11) 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.

12) 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.

13) 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.

14) 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.

15) 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.

16) 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.

17) 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.

IV. Noise and vibration monitoring and prevention

18) The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.

19) 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.

20) 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.

V. Mining plan

21) 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.).

22) 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 until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

VI. Land reclamation

23) 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.

24) 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.

25) 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.

26) 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.

VII. Transportation

27) 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].

28) 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.

VIII. Green Belt

29) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease 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.

30) 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 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.

31) 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.

IX. Public hearing and human health issues

32) 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.

X. Corporate Environment Responsibility (CER)

33) 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.

XI. Miscellaneous

34) 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.

35) 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 development work.

36) 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.

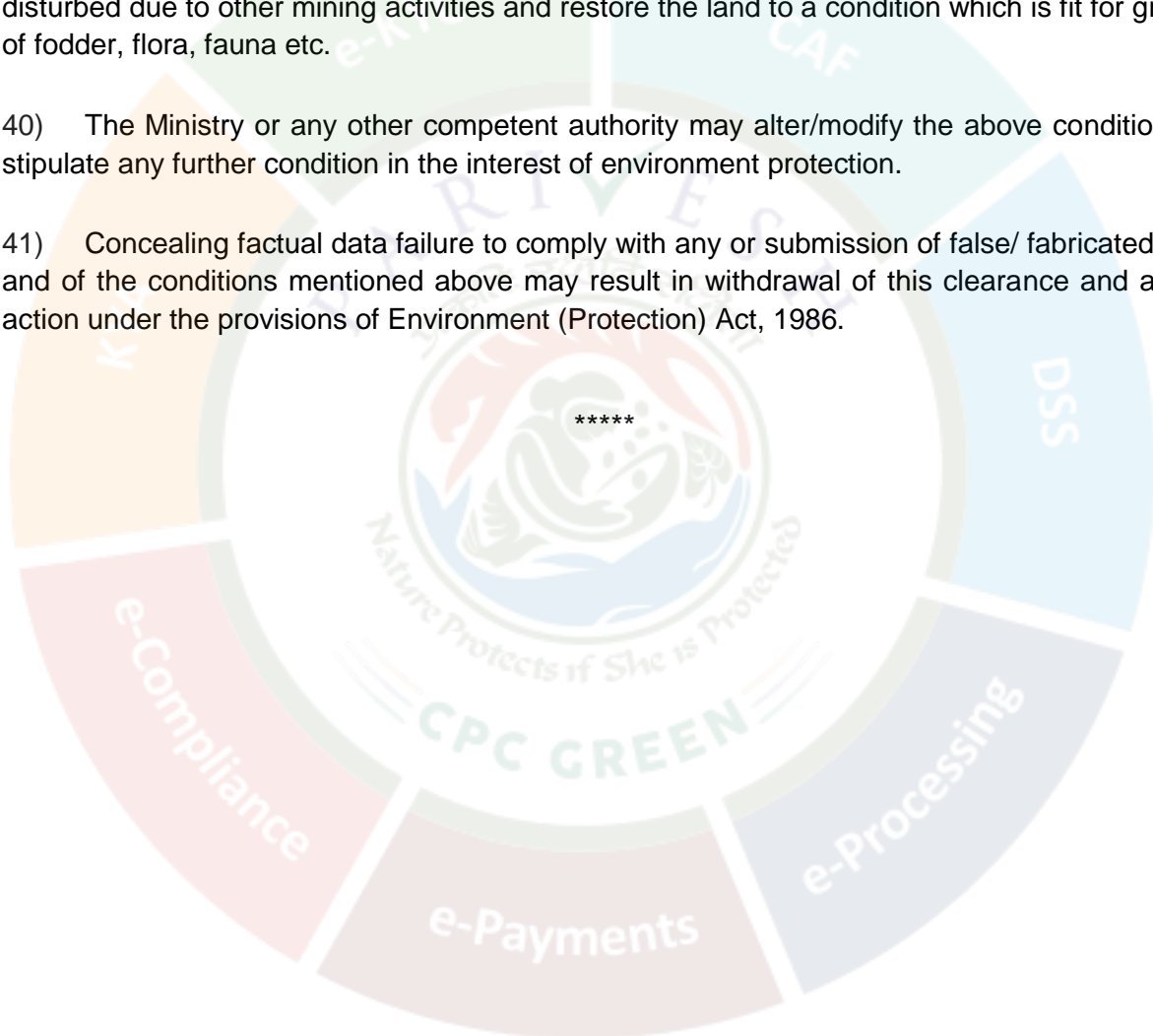
37) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.

38) 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.

39) 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 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.

40) The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

41) 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.



Annexure (3)

The instant proposal is for Environmental Clearance under the provision of MoEF&CC Notification S.O. 1530 (E) dated 6th April 2018 for Mothala Balachod Bauxite Mining Project with the Production Capacity of 42,000 TPA in the mine lease area of 280.7686 Ha by M/s Gujarat Mineral Development Corporation Limited, located at Villages Balachod, Mothala, Khandai, Tehsil Abdasa, District Kutch, Gujarat.

2. The details of the project as ascertained from the document submitted by the Project Proponent and revealed from the discussions held during the meeting are given as under: -

- i. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and falls under Category "A" as the mining lease area is greater than 250ha and appraised at the Central level.
- ii. The mine lease area is located between Latitude: 23°13'17"N - 23°15' 58" N and Longitude: 69°07'24"E - 69°10' 41"E. The mine lease area falls under the Survey of India Toposheet No: 41 E/4 and falls in Seismic Zone – V as per IS-1893 (Part-1)-2002.
- iii. Details of previous Environmental Clearance (EC): -
 - a. The Project Proponent obtained Environmental Clearance (EC) vide Lr no. J-11015/131/2005-IA II(M) dated 08.12.2005 for production capacity of 42,000 TPA of Bauxite over an area of 299.40 ha under the EIA Notification, 1994.
- iv. Details of Terms of Reference (ToR):
 - a. The Project Proponent obtained Terms of Reference (ToR) vide Lr.No: IA-J-11015/150/2018-IA-II(NCM) dated 18.04.2022 for Mothala Balachod Bauxite Mining Project for the Production Capacity of 42,000 TPA of Bauxite in the mine lease area of 280.7686 Ha under MoEF&CC Notification S.O.1530(E) dated 6th April 2018.
- v. Details of Mine Lease:
 - a. The Project Proponent submitted that initially mining lease was granted by the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G58/703/CHH dated 12.01.2006 for mineral Bauxite over an area of 299.40.05 ha for the period of 30 years.
 - b. Then, the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G-58/703/CHH dated 02.02.2007 revised and the granted the mine lease area for 280.76.86 ha. The lease agreement was thereof executed on 07.03.2007.
 - c. Further, the Industries and Mines Dept., Govt. of Gujarat vide order no: MCR/1591/G-58/703/CHH have extended the lease period up to 06.03.2057.

vi. Details of Land Use/Land Cover of the Mine Lease Area:

Private land	-
Government land	280.7686 Ha
Total Mining lease area (MLA)	280.7686 Ha (Government Waste Land)

vii. Mining plan details:

Review and updation of Mining Plan along with Progressive Mine Closure Plan approved by Indian Bureau of Mines (IBM) Gandhinagar.	Letter No.	Approved from IBM Gandhinagar vide letter no. 684(4)(1)(MP-345(117)/2021-22 GNR/1339
	Date	13/08/2021
	Validity	31/03/2026.
Mining Parameters	Quantitative Description	
Bench Height	3 m	
Bench Width	3 m	
Method of Mining	Semi Mechanized Open Cast Mining	
Individual bench slope	70° from the vertical	
Overall pit slope	37°	
Drilling/Blasting	In order to meet the present requirement of production shallow hole drilling, blasting, mechanized excavation combined with manual sorting and loading and transportation by small to medium size excavator (Bucket capacity around 1 Cum.) and dumper, are in use. During loading ample precautions are being taken to separately load the waste material and thus minimize the subsequently sorting of the ROM.	
RoM output size	9600 MT	
Life of mine	49 Years	
Transportation details	Dumpers	
Dumpers capacity	17tonnes	
Mineable Reserves	20,62,589 Tonnes (as on 01.04.2021)	
Individual bench slope	70° from the vertical	
Ultimate depth of mining	5 mbgl	
Groundwater level	15-20m bgl	
Groundwater intersection	No groundwater intersection	
Overall pit slope	37°	
Details of existing and proposed	There is no proposal to install crusher within the mining lease area.	
Mineral beneficiation	There will be no mineral beneficiation activities within the mine lease area.	

Transportation details	The graded bauxite ore is being transported from Mothala - Balachod Bauxite Mine to Gujarat Credo Mineral Industries Ltd and allied industries through thereby SH-49
Dumpers capacity	17tonnes
Generation of Topsoil/OB & its Management during plan period & conceptual period	There will be no generation of Overburden & Mineral rejects during the plan period (2021-22 to 2025- 26).
Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	Topsoil generation in current plan period (2021-22 to 2025-26) is 16173 cumand shall be disposed of by means of stacking or by backfilling in mine voids & use in development of green belt respectively.

viii. Nearest village / town/ highway/railway station / water bodies

Particulars	Particular's Name	Distance & Directions
Nearest Village/Town	Balachod Nani	0.5 km in East direction
Nearest Highway	SH 49	6.47 Km/ S
Railway Station	Bhuj	53.90 Km/ E
Nearest Air Port	Bhuj	51.88 Km/ E
Nearest Reserved/Protected forests	Open Mixed Jungle Wamoti Reserve Forest Mothala Reserve Forest Naranpar Reserve Forest	Adjacent/W 5.17 Km, /N 7.15 Km/ SSW 6.34 Km/E

ix. Water requirement

Total water requirement	32 KLD	Fresh water	32 KLD
		Treated water	-
Source	Existing water supplier through mobile tankers.		
Permission	NA		
Additional information (if any)	No additional water requirement envisaged in this project. Moreover, rain water accumulated in pits, if any, is being used for dust suppression and this will be continued as such in future also.		

x. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Protected Area /Environmental Sensitivity Zone	Yes/No	Details of Certificate /letter/Remarks

Forest Land	No	The Project Proponent submitted the letter from the Forests & Environment Department, Government of Gujarat vide letter dated 27.12.2023 stating that the site is adjoining to forest area. Applicant is required to do mining by keeping 50-meter distance from forest area as per Chief Conservator of Forest, Wildlife, Gujarat State, Gandhinagar's letter WPS/32/B/ 11755- 62/99-2000 Date:30/12/1999.
National Park	No	
Wildlife Sanctuary	No	
Eco-Sensitive Zone (ESZ)	No	Project Proponent reported that there is No National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, within the 10 km radius study area. The nearest wildlife sanctuary is Great Indian Bustard Sanctuary is about 44.50 km in West direction from project site.
Coastal Regulation Zone (CRZ)	No	Not Applicable
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	Project Proponent submitted that the Deputy Conservator of Forest, Kutch West Division vide Lr.No: B/LAND/T-11/4355/2023-24 dated 13.12.2023 mentioned that following Schedule - I species are observed in a study area of 10 km radius such as Peafowl (Pavo cristatus), Chinkara (Gazella bennettii), Indian Monitor Lizard (Varanus benghalensis), Leopard (Pantherapardus), Striped Hyena (Hyaena hyaena), Jungle Cat (Felis chaus), Honey Badger(Mellivoracapensis) and India crocodile (Crocodyluspalustris).
Wildlife Conservation Plan	Yes	Site Specific Biodiversity Conservation Plan submitted to the PCCF & Chief Wildlife Warden, Gandhinagar vide Letter No. GMDC/ENV/140/2023-24 dated 18.11.2023 for approval.

xi. Greenbelt/plantation Details

Proposed area for green belt/plantation	Existing: 3.94 Ha (4,310 no. of saplings) Proposed 2.5Ha (3,000 no. of saplings during Plan Period) Total: 6.44Ha during end of plan period Total Green Belt at the end of life of mine will be 10.00Ha.
Budget for green plant& plantation till the end of life of mine.	4.0 Lakhs

Budget for nursery	-
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xii. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)	
Period of baseline data collection	Baseline Monitoring studies is being already carried out during Winter Season: Period (1 st Dec. 2019 to 29 th Feb. 2020) and Additional one month baseline monitoring 1st May 2022 to 31st May 2022) - Summer Season).
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	

Details of Baseline data (1st Dec. 2019 to 29th Feb. 2020-Winter Season) and revalidation of baseline data (1st May, 2022 to 31st May, 2022- Summer Season) as mentioned below:

A. Air Environment: Summary of Ambient Air Quality Results for Period from 1st December 2019 to 29th February 2020 and for period from 1st May, 2022 to 31st May, 2022- Summer Season

Sr. No.	Location	Site			PM ₁₀	PM _{2.5}	SO ₂	NO ₂	CO	Ozone	NH ₃
					µg/m ³	µg/m ³	µg/m ³	µg/m ³	mg/m ³	µg/m ³	µg/m ³
1	Project Block-I	Site,	Dec, 2019	Min-	58.0	18.5	11.7	17.9	0.351	8.3	7.6
				Max	75.5	26.3	17.6	25.3	0.475	12.2	11.5
			Feb, 2020	98 th	74.9	26.0	17.4	24.8	0.469	12.0	11.3
				May, 2022	Min-	58.5	21.4	10.1	14.9	0.323	7.9
Max	72.4	27.4	15.3		19.2	0.401	10.4				
			98 th	67.5	27.2	15.2	19.1	0.399	10.3	9.1	
2	Project Block-II	Site,	Dec, 2019	Min-	61.9	19.7	10.2	16.2	0.241	6.7	7.7
				Max	78.2	34.0	16.1	23.0	0.520	13.0	14.2
			Feb, 2020	98 th	77.0	33.4	15.7	23.0	0.514	12.9	13.8
				May, 2022	Min-	58.5	22.3	9.5	14.2	0.264	7.4-9.5
Max	72.4	31.4	13.4		19.7	0.348					
			98 th	71.6	31	13.3	19.5	0.346	9.5	9.6	
3	Khanpar	Site,	Dec, 2019	Min-	49.4	16.8	9.4	8.9	0.242	7.5	5.9-8.5
				Max	68.9	22.9	15.1	13.9	0.308	12.4	
			Feb, 2020	98 th	67.8	22.8	14.8	13.6	0.306	12.0	8.4
				May, 2022	Min-	50.6	16.4	7.7	12.2	0.237	6.1-8.8
Max	65.9	23.6	10.7		16.9	0.301	8.8	7.8			
			98 th	65.9	23.6	10.7	16.9	0.301	8.8	7.8	
			98 th	65.0	23.4	10.6	16.8	0.300	8.8	7.8	

4	BalachodNani	Dec, 2019	Min-	57.7-	19.3-	6.1-	16.6-	0.178-	7.5-	4.9-9.2
			Max	76.6	26.1	9.7	23.4	0.269	14.1	
		Feb, 2020	98 th	75.5	25.9	9.4	23.0	0.263	14.0	9.0
			May, 2022	Min-	48.1-	18.1-	6.8-	15.4-	0.254-	7.6-
Max	71.1	26.3		9.7	20.6	0.312	12.1			
5	Mothala	Dec, 2019	Min-	61.2-	17.3-	6.6-	11.4-	0.246-	8.8-	6.1-
			Max	85.1	26.6	9.5	17.2	0.371	15.8	11.6
		Feb, 2020	98 th	82.2	25.7	9.2	17.0	0.358	15.6	11.2
			May, 2022	Min-	63.8-	22.8-	11.5-	16.4-	0.274-	9.6-
Max	72.4	33.4		17.1	21.6	0.572	13.4	11.5		
6	Bhawonipur	Dec, 2019	Min-	53.3-	16.7-	7.3-	12.6-	0.240-	8.1-	4.7-7.8
			Max	67.5	23.6	10.9	17.5	0.313	12.1	
		Feb, 2020	98 th	67.0	23.3	10.6	17.0	0.308	11.9	7.4
			May, 2022	Min-	51.7-	20.3-	8.3-	12.4-	0.213-	6.9-9.5
Max	67.7	26.2		11.2	15.3	0.321				
7	WamotiMoti	Dec, 2019	Min-	59.0-	20.3-	9.0-	10.8-	0.260-	6.7-9.7	5.4-8.5
			Max	80.4	28.3	13.1	17.2	0.336		
		Feb, 2020	98 th	79.3	27.7	13.1	16.8	0.330	9.6	8.5
			May, 2022	Min-	58.7-	23.6-	10.8-	13.5-	0.324-	8.4-
Max	71.9	30.2		16.1	20.8	0.373	12.8	10.3		
8	Bhimpar	Dec, 2019	Min-	41.8-	14.8-	9.5-	13.9-	0.299-	7.5-	6.4-
			Max	66.3	22.4	14.2	19.6	0.359	11.4	10.3
		Feb, 2020	98 th	65.6	22.4	14.2	19.3	0.353	11.3	9.9
			May, 2022	Min-	52.3-	18.7-	9.3-	13.5-	0.238-	6.8-9.2
Max	66.1	24.5		12.2	17.4	0.311				
			98 th	65.4	24.4	12.1	17.4	0.311	9.1	7.7
		CPCB Standards		100 (24hr)	60 (24hr)	80 (24hr)	80 (24hr)	2 (8hr)	100 (8hr)	400 (24hr)

B. Noise Levels: Details of Ambient Noise Levels for the Period from 1st December 2019 to 29th February 2020) are as mentioned below:

Sr. No.	Monitoring Locations	Equivalent Noise Level	
		Leq _{Day}	Leq _{Night}
Residential Area			
•	Balachod Nani	52.4	42.9
•	Mothala	54.5	37.8
CPCB Standards dB(A)		55.0	45.0
Commercial Area			
•	Khanpar	62.5	49.5
•	Nr. Sumrasar Talav	55.2	40.6
•	Bhimpar	58.9	47.9
CPCB Standards dB(A)		65.0	55.0
Silence Zone			
•	Balachod Moti	47.1	36.4
CPCB Standards dB(A)		50.0	40.0
Industrial Area			
•	Project Site (Block- I)	68.5	42.0
•	Project Site (Block- II)	66.8	43.1
CPCB Standards dB(A)		75.0	70.0

(Period – 1st May 2022 to 31st May 2022)

Sr. No.	Monitoring Locations	Equivalent Noise Level	
		Leq _{Day}	Leq _{Night}
Residential Area			
•	Balachod Nani	51.4	40.8
•	Mothala	53.3	42.5
CPCB Standards dB(A)		55.0	45.0
Commercial Area			
•	Khanpar	63.1	52.4
•	Nr. Sumrasar Talav	57.5	41.7
•	Bhimpar	57.2	46.5
CPCB Standards dB(A)		65.0	55.0
Silence Zone			
•	Balachod Moti	48.3	37.1
CPCB Standards dB(A)		50.0	40.0
Industrial Area			

•	Project Site (Block- I)	64.2	41.4
•	Project Site (Block- II)	63.7	42.1
CPCB Standards dB(A)		75.0	70.0

C. Water Environment: Summary of Surface Water Quality recorded for period from 1st December 2019 to 29th February 2020 and for period from 1st May, 2022 to 31st May, 2022 are as follows:

Parameters	Unit	Baseline Monitoring Period (1 st Dec, 2019 – 29 th Feb, 2020)	Additional 1 Month Baseline Monitoring (1 st May, 2022 – 31 st May, 2022)	IS 2296:1992; Class C (Drinking water source after conventional treatment and dis- infection)
		Range	Range	
pH	-	6.57 – 7.73	6.95 – 7.92	No relaxation (6.0 to 9.0)
EC	µs/cm	716 – 1879.70	936.25 – 2130.66	-
TDS	mg/l	442 – 1100	535 – 1246	1500
Total hardness	mg/l	123.22 – 197.96	182.46 – 266.21	-
DO	mg/l	6.0 – 6.3	5.2 – 5.9	4.0
BOD	mg/l	3.6 – 7.1	4.81 – 8.25	3.0
COD	mg/l	11.7 – 22.4	17.35 – 42.51	-
Chloride	mg/l	63.59 – 148.61	73.13 – 170.90	600
Sulphate	mg/l	7.68 – 48.61	11.14 – 70.48	400
Nitrate	mg/l	4.83 – 19.23	6.57 – 15.27	50
Fluoride	mg/l	0.28 – 0.73	0.35 – 0.91	1.5
Iron	mg/l	0.01– 0.28	0.05 – 0.21	0.5
Cadmium	mg/l	BDL (DL - 0.001)	BDL (DL - 0.001)	0.01
Arsenic	mg/l	BDL (DL - 0.01)	BDL (DL - 0.01)	0.2
Zinc	mg/l	BDL (DL - 0.01)	BDL (DL - 0.01)	15
Lead	mg/l	BDL (DL - 0.001)	BDL (DL - 0.001)	0.1
Chromium	mg/l	BDL (DL - 0.03)	BDL (DL - 0.03)	0.05
Total Coliform	MPN/100 ml	Present	76 – 240	5,000

D. **Ground Water Quality:** Summary of Ground Water Quality recorded for period from 1st December 2019 to 29th February 2020 and for period from 1st May, 2022 to 31st May, 2022 are as follows:

Parameters	Unit	Baseline Monitoring Period (1 st Dec, 2019 – 29 th Feb, 2020)	Additional 1 Month Baseline Monitoring (1 st May, 2022 – 31 st May, 2022)	Permissible Limit
		Range	Range	
pH	-	7.11 - 7.88	7.29 – 8.22	No relaxation (6.5 to 8.5)
EC	µs/cm	1380 – 3300	1371.04 – 3036.25	-
TDS	mg/l	760 – 1818	897 – 1735	2000
Total hardness	mg/l	366.30 – 777.0	446.13 – 772.46	600
Chloride	mg/l	136.97 – 557.69	160.25 – 492.50	1000
Sulphate	mg/l	18.14 – 104.95	27.57 – 148.15	400
Nitrate	mg/l	BDL (DL -2)– 18.33	3.65 – 21.48	No relaxation (45)
Fluoride	mg/l	0.31 – 1.66	0.36 – 1.91	1.5
Iron	mg/l	BDL (DL - 0.01)– 0.03	0.14 – 0.31	No relaxation (1.0)
Cadmium	mg/l	BDL (DL - 0.001)	BDL (DL - 0.001)	No relaxation (0.003)
Arsenic	mg/l	BDL (DL - 0.01)	BDL (DL - 0.01)	No relaxation (0.01)
Zinc	mg/l	BDL (DL - 0.01)	0.11 – 0.18	15
Lead	mg/l	BDL (DL - 0.001)	BDL (DL - 0.001)	No relaxation (0.01)
Chromium	mg/l	BDL (DL - 0.03)	BDL (DL - 0.03)	No relaxation (0.05)

E. Soil Quality: Summary of Ground Water Quality recorded for period from 1st December 2019 to 29th February 2020 and for period from 1st May, 2022 to 31st May, 2022 are as follows:

Physico-Chemical Characteristics			
Parameters	Unit	Baseline Period from 1 st Dec, 2019 to 29 th Feb, 2020	Additional Study Period From 1 st May, 2022 to 31 st May, 2022
pH	-	6.9 – 8.4	7.28 – 8.72
EC	µs/cm	140 – 300	175.59 – 370.96

Infiltration Rate	mm/hr	17.11 – 20.15	7.86 – 26.48
Bulk Density	g/cm ³	1.521 – 1.788	1.474 – 1.725
Water Holding Capacity	%	19.17 – 25.42	29.14 – 38.64
Organic Carbon	%	0.25 – 0.68	0.28 – 0.76
Macro Nutrients			
Nitrogen	Kg/hect	77.90 – 120.46	107.5 – 164.32
Phosphorus	Kg/hect	4.36 – 25.76	28.12 – 45.43
Potassium	Kg/hect	370.40 – 680.10	240.76 – 351.20
Micro Nutrients			
Iron	mg/kg	1.300 – 1.320	1.454 – 2.508
Manganese	mg/kg	2.32 – 2.35	4.710 – 6.589
Zinc	mg/kg	0.18 – 0.19	0.147 – 0.216
Copper	mg/kg	Absent – 0.232	0.194 – 0.322
Nickel	mg/kg	Absent	Absent
Cadmium	mg/kg	Absent	Absent
Lead	mg/kg	5.05 – 5.11	1.112 – 2.329

- xiii. Details of Public Hearing (PH): The Project Proponent has published the public notice for inviting comments upon present mining operations and their redressal as it is the case of revalidation of existing EC as follows:

Advertisement for PH with date	<p>The Public Hearing was conducted on dtd 11.11.2003 and EC was obtained in 2005. As desired by the EAC (Non - Coal), MoEF&CC, New Delhi and ToR condition for regularization of existing EC. M/s. GMDC submitted EIA-EMP report at GPCB, Kutch (West) to carry out public consultation process as per Ministry's OM dated 16.02.2021.</p> <p>Accordingly, an Advertisement/Public Notice was published in English newspaper in "The Times of India" on 03/03/2023 and in Gujarat in "Kutch Mitra" on 03/03/2023 for information of the stakeholders to invite comments about present mining operations and their redressal on the above project.</p>
Date of PH	
Venue	
Chaired by	
Main issues raised during PH	
Budget proposed for addressing issues raised during PH	
Additional information (if any)	

	In connection with the public notice published for a period of 30 days, no any comments, representations are received either by written, oral, personnel or through any other media by this office within the stipulated period/time for the projects as mentioned in the advertisement.
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xiv. Court case details:

Court Case	The Project Proponent submitted that there is no litigation pending against the project and/or land in which the project is proposed to be set up.
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xv. Rehabilitation & Resettlement:

R & R details	The Project Proponent reported that no private land within the mine lease will be acquired for mining or any other project related activity and hence no rehabilitation and resettlement is involved under the present proposal.
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xvi. Affidavit/Undertaking details:

Affidavit as per Ministry's OM dated 30.05.2018	The Project Proponent submitted the Affidavit dated 14.03.2019 stating that the company undertakes by affidavit that it will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2nd August 2017 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors before grant of ToR/EC.
Undertaking of Project Proponent dated 16.10.2023	The Project Proponent submitted an undertaking to the effect that ToR issued by Ministry vide letter dated 18.04.2022 for Mothala Balachod Bauxite mine of M/s Gujarat Mineral Development Corporation Ltd has been complied with and the data submitted is factually correct. The Project Proponent also mentioned that they take the ownership of the content of this EIA report.
Undertaking of EIA Consultant dated 18.12.2023	The EIA Consultant submitted a declaration stating that no unethical practice like 'copy and paste' and used external data/text without proper acknowledgement, while preparing this EIA report. The consultant organization shall be fully accountable for any misleading information mentioned in this statement.

xvii. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the inception of the mine:

Particulars	Letter no. and date																																																																				
Consent to Establish/ Consent to Operate	<ul style="list-style-type: none"> Renewal of Consolidated Consent and Authorization (CC&A) granted by the Gujarat Pollution Control Board (GPCB) vide Consent Order No. AWH-125340 dated 04.04.2023 for mining of raw Bauxite of 42,000 MT/annum over an area of 280.76.86 ha and is valid up to 08.03.2028. 																																																																				
Certified EC compliance report	<ul style="list-style-type: none"> Certified EC Compliance of EC dated 08.12.2005 obtained from RO, MoEFCC, Gandhinagar on dated. 13th Nov. 2023. Site visit was conducted by RO on 09.05.2023. Project Proponent submitted the action taken report to the RO, MoEFCC, Gandhinagar on 28.11.2023. The action plan for green belt development along with budgetary expenditure and timeline was submitted to the IRO, MOEFCC – Gandhinagar in line with observation made in EC compliance. The closure report from IRO, MoEFCC – Gandhinagar received on 27.02 2024 																																																																				
Certified past production	<p>Year-wise certified past production details from Geologist, Geology and Mining Dept., Govt. of Gujarat, District – Kutch are given below:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Plant grade & non plant grade production (mt.)</th> <th>Dust & sub grade (mt.)</th> <th>Total (mt.)</th> </tr> </thead> <tbody> <tr><td>2006-07</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>2007-08</td><td>2323</td><td>0</td><td>2323</td></tr> <tr><td>2008-09</td><td>41933</td><td>5000</td><td>46933</td></tr> <tr><td>2009-10</td><td>12846</td><td>1285</td><td>14131</td></tr> <tr><td>2010-11</td><td>36928</td><td>5007</td><td>41935</td></tr> <tr><td>2011-12</td><td>28184</td><td>2792</td><td>30976</td></tr> <tr><td>2012-13</td><td>39096</td><td>3802</td><td>42898</td></tr> <tr><td>2013-14</td><td>32047</td><td>3205</td><td>35252</td></tr> <tr><td>2014-15</td><td>2075</td><td>264</td><td>2339</td></tr> <tr><td>2015-16</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>2016-17</td><td>36422</td><td>3652</td><td>40074</td></tr> <tr><td>2017-18</td><td>10045</td><td>200</td><td>10245</td></tr> <tr><td>2018-19</td><td>28796</td><td>1269</td><td>30065</td></tr> <tr><td>2019-20</td><td>19205.196</td><td>791.25</td><td>19996.45</td></tr> <tr><td>2020-21</td><td>11896.804</td><td>456.20</td><td>12353.01</td></tr> <tr><td>2021-22</td><td>23097.388</td><td></td><td>23097.388</td></tr> </tbody> </table>	Year	Plant grade & non plant grade production (mt.)	Dust & sub grade (mt.)	Total (mt.)	2006-07	0	0	0	2007-08	2323	0	2323	2008-09	41933	5000	46933	2009-10	12846	1285	14131	2010-11	36928	5007	41935	2011-12	28184	2792	30976	2012-13	39096	3802	42898	2013-14	32047	3205	35252	2014-15	2075	264	2339	2015-16	0	0	0	2016-17	36422	3652	40074	2017-18	10045	200	10245	2018-19	28796	1269	30065	2019-20	19205.196	791.25	19996.45	2020-21	11896.804	456.20	12353.01	2021-22	23097.388		23097.388
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xviii. ADS details:

The Proposal was earlier considered in 26th EAC (Non-Coal Mining) meeting held during 31st January & 1st February, 2024 wherein the Committee has considered and deferred the proposal and requested to submit the additional information. The PP has submitted the reply on 06.04.2024 are as follows:

Sl. No.	ADS Point	Response by Project Proponent
1.	The Project Proponent needs to justify that why amendment in EC not obtained for change in reduction of mine lease area from 299.40 ha to 280.76.86 ha.	<ul style="list-style-type: none"> • Earlier a LOI was issued for mineral bauxite over 299.4005 ha area for 20 years vide Gujarat State Govt. grant order no. 4/221/95/M-19 dated 18.07.1997 and same was intimated by Dy. Secretary, Industries & Mines Department, Government of Gujarat vide letter reference no. MC/1591/G-58/703/Chh dated 03.09.1997 with direction to obtain approval of mining plan and environmental clearance from respective competent authorities. • The first mining plan for the applied lease area (299.40 ha) was approved by Indian Bureau of Mines vide letter no. 82(23) (291)/99-MCCM(N) UDP dated 14.10.1999. • Environmental Clearance was granted for the Mothala Balachod Bauxite mine having production capacity of 42,000 TPA in 299.40 ha under the purview of EIA notification 1994 vide letter no. J-11015/131/2005-IA II (M) dated 08.12.2005. • However, as per corrigendum vide letter no. MCR/1591/G-58/703/CHH date 02.02.2007 issued by Under Secretary to Government, Industries & Mines Department, Government of Gujarat. Mining Lease area was amended from 299.40 to 280.7686 Ha at the time of

Sl. No.	ADS Point	Response by Project Proponent
		<p>lease deed by mentioning that as Commissioner, Geology and Mining has made mining proposal for some change in the area granted to M/s GMDC at Moti-Balachod from 168.6723 Ha. to 150.0404 Ha. in the said order and hence 299.4005 Ha read as 280.7686 Ha. The remaining terms of condition in existing EC viz. method of mining, production capacity, etc. remains unchanged.</p> <ul style="list-style-type: none"> • Thereafter, the mining lease executed on 07.03.2007 vide reference no. GKK/M/021/2240 for 28.7686 only, which was signed by Collector, Kutch and authorities of GMDC for a period of 30 years from the date of mining Lease execution. • Thus, Honourable EAC (Non-Coal) is requested to consider EC regularization proposal for 280.7686 Ha lease area for the grant of EC considering the following facts: <ul style="list-style-type: none"> # Due to oversight it has been missed to seek amendment in this regard. However, lease neither has been increased nor any mining activity carried out beyond the area of lease dead. # approved Mine Plan is for 280.7686 only and the same was share to EAC (Non-Coal) during ToR Application as well as EC Appraisal Application and subsequent presentations. # ToR Application submitted for the Regularization of existing EC, under the purview of EIA Notification 2006 in the year 2018, was for 280.7686 Ha only and after detailed discussion, Honourable EAC (Non-

Sl. No.	ADS Point	Response by Project Proponent														
		<p>Coal) was granted the ToR vide F. No-IA-J-11015/150/2018-IA-11(M) 18 April 2022 for 280.7686 ha only.</p> <p># Certified Compliance Report (CCR) from the Regional Office of MOEFCC has been issued twice vide Dated 26/03/2019 and dated 13/11/2023 and during every site visit, area of mine lease was submitted as 280.7686 ha only.</p> <p>Therefore, looking to the above, Honourable EAC (Non-Coal) is kindly requested to consider EC Appraisal Application for the Regularization of existing EC for an area 280.7686 ha only.</p>														
2.	<p>The Project Proponent needs to submit the current practice of method of mining in line with the approved mining plan. Accordingly, the Project Proponent needs to devise the site specific mitigation measures for environment attributes.</p>	<p>Mining method is submitted hereunder in line with existing approved mining plan for the current period of 2021-22 to 2025-26.</p> <p>The opencast method of mining shall be continued with rock breaker and excavator-tipper combination. The Broad parameters of mining operation will be as below:</p> <table border="1" data-bbox="799 1413 1409 2020"> <tbody> <tr> <td data-bbox="799 1413 1062 1503">Number of working days</td> <td data-bbox="1062 1413 1409 1503">300 days/year</td> </tr> <tr> <td data-bbox="799 1503 1062 1585">Working shift/day</td> <td data-bbox="1062 1503 1409 1585">1 day shift</td> </tr> <tr> <td data-bbox="799 1585 1062 1668">Working benches</td> <td data-bbox="1062 1585 1409 1668">3 no.</td> </tr> <tr> <td data-bbox="799 1668 1062 1715">Bench Height</td> <td data-bbox="1062 1668 1409 1715">3.0m (max.)</td> </tr> <tr> <td data-bbox="799 1715 1062 1883">Width</td> <td data-bbox="1062 1715 1409 1883">For running bench 10m For ultimate bench 2.75m max.</td> </tr> <tr> <td data-bbox="799 1883 1062 1930">Bench slope</td> <td data-bbox="1062 1883 1409 1930">>55°</td> </tr> <tr> <td data-bbox="799 1930 1062 2020">Ultimate Pit slope</td> <td data-bbox="1062 1930 1409 2020">45°</td> </tr> </tbody> </table>	Number of working days	300 days/year	Working shift/day	1 day shift	Working benches	3 no.	Bench Height	3.0m (max.)	Width	For running bench 10m For ultimate bench 2.75m max.	Bench slope	>55°	Ultimate Pit slope	45°
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Sl. No.	ADS Point	Response by Project Proponent
		<p>Drilling and Blasting shall be practiced very rarely as and when hard strata will be encountered, however since the year 2014, no blasting has been done. Detail of Blasting Pattern, as per the approved mine plan has been submitted.</p> <p>The site specific mitigation measures of environment attributes are provided in EIA report.</p>
3.	<p>The Project Proponent needs to specifically define the area developed under greenbelt, along roads and in non-mineralized area, no. of saplings planted under each area and their survival rate and budget spent towards the same with supporting documents.</p>	<p>The detailed plantation under greenbelt development along roads and in non-mineralized area, no. of saplings planted under each area and their survival rate and budget spent towards the same with supporting documents has been submitted. Further, GMDC will make all necessary efforts to develop green belt more efficiently with good survival rate.</p>
4.	<p>The Project Proponent needs to submit the closure report w.r.t. greenbelt issued by the Regional Office, MoEF&CC.</p>	<p>Project proponent had submitted the action plan for green belt development along with budgetary expenditure and timeline to the IRO, MOEFCC – Gandhinagar.</p> <p>The closure report from IRO, MoEFCC – Gandhinagar received on 27th February 2024 and has been submitted.</p>
5.	<p>The Project Proponent needs to submit the more precise, actionable and monitorable plan for activities proposed under community development along with timeline.</p>	<p>The precise, actionable and monitorable plan for the activities proposed under community development in year 2024-25 has been submitted.</p>
6.	<p>The Project Proponent needs to submit the letter from the State Forest Dept. regarding the location of National Park, Wildlife</p>	<p>The letter from the office of Deputy Conservator of Forests (DCF), Kutch West Forest Dept. (State Forest Dept. – Bhuj received on 05/03/2024 vide letter no.</p>

Sl. No.	ADS Point	Response by Project Proponent
	Sanctuary, Tiger/Elephant Corridors etc., within 10 km radius of the study area.	ESZ/ESA, Reserves, C/JMN/Te.11/530/23-24. It is informed that there is no National Park, Wildlife Sanctuary, ESZ/ESA, Tiger/Elephant Reserves, Corridors etc., within 10 km radius of the Mothala Balachod Bauxite Mining Project. However, the nearest Eco Sensitive Zone (ESZ) of Kutch Bustard Sanctuary is at 8.5 Kms from the project site. The letter has been submitted.

xix. Details of the Environment Management Plan (EMP):

Sr. No.	Description	Existing Recurring Cost Per Annum (Rs. In Lacs)	Proposed Cost (Rs. In Lacs)		Justification for Additional Cost
			Capital	Recurring	
1	Air pollution Control	3.00	10.00	0.50	Additional installation of water sprinklers
2	Water Pollution Control	0.50	5.00	1.00	Garland drain, Retaining wall & Siltation tank
3	Environment Monitoring and Management	1.00	30.00 (considering online AAQMS)	10.00	Installation of weather station; Noise meter & 1 pair of RDS & FPS & its annual maintenance and regular Environmental Monitoring
4	Wired Fencing	1.50	-	-	NA
5	Noise Pollution Control	0.50	-	-	
6	Occupational	1.00	2.00	0.70	Implementation of

Sr. No.	Description	Existing Recurring Cost Per Annum (Rs. In Lacs)	Proposed Cost (Rs. In Lacs)		Justification for Additional Cost
			Capital	Recurring	
	Health				Covid 19 as per the directive of Govt. of India for Employees
7	Green Belt	4.00	6.00	4.00	Plantation
8	Drinking Water	1.50	0.50	0.20	Additional water filtration system.
	Total	13.00	53.50	16.40	
	Grand Total	-	53.50	29.40	Total Recurring cost represent existing and proposed
9	Cost For CSR Activity: Project Proponent will spend amount of 2% of their gross income for CSR (Corporate Social Responsibilities).				

xx. Details of project cost and employment:

Particulars	(Rs. In Lakhs)
Capital Cost for Environment Protection	Capital Cost 53.50 Lakhs Recurring Cost 29.40 Lakhs
Budget for addressing the Public Hearing issues	The precise, actionable and monitorable plan for the activities proposed under community development in year 2024-25 is of Rs. 1845000
Total Cost for EMP	Rs. 71.95 Lakhs (Capital cost of Env. Protection and Need based Socio-economic survey)
Recurring Cost for EMP	29.40 lakhs
Project Cost	60 Lakhs
Employment	34 nos.

3. Observation and Recommendation of the Committee:

The instant proposal is for Environmental Clearance under MoEF&CC Notification S.O.1530 (E) dated 6th April 2018. The Project Proponent was granted Terms of Reference (ToR) on 18.04.2022. The PP presented the reply of the ADS points that were raised vide minutes of the 26th EAC meeting held during 31st January 2024- 1st February 2024 and stated that earlier Lol was issued for mineral bauxite over an area of 299.4005 vide EC dated 08.12.2005. However, as per corrigendum vide letter dated 02.02.2007 issued by Industries & Mines Department, Govt of Gujarat, the mining lease area was amended from 299.40 to 280.7686 ha at the time of lease deed. The EAC also enquired about the current practice of mining, the PP replied that they are undertaking opencast method of mining with rock breaker and excavator-tipper combination. PP also informed that drilling and blasting shall be practiced very rarely as and when hard strata will be encountered, PP further mentioned that they have not undertaken any blasting since the year 2014. With regard to the ADS point on plantation, PP submitted the detailed plantation under greenbelt development along roads and in non-mineralized area. PP committed that they will make all necessary efforts to develop green belt more efficiently with good survival rate.

The EAC noted the plantation report submitted by PP and asked the reason for the poor survival of the plants. PP informed that poor survival rate has been observed due to harsh climatic conditions, erratic rainfall, poor soil quality and poor land topography. PP mentioned that as on dated total 4530 No of plants have survived covering an area of 4.34 ha. Species planted includes Melai Azadiracta, Prosopis cineraria, Acacia Senegal , Magnifera indica, Guava etc. The EAC asked the PP to engage institute of national repute having expertise in plantation in arid climate to enhance the survival of the planted species. With regard to presence of Bustard, PP informed that as per DCF letter dated 5.03.2024, there are no national park, wildlife sanctuary, ESA/ESA present within 10 km radius of the Mothala Balachod Bauxite Mine. However, the nearest ESZ of Kutch Bustard Sanctuary is at a distance of 8.5 kms from the project site. The EAC advised the Project Proponent to adopt and implement protection and mitigation measures for conservation of Great Indian Bustard. The EAC also asked the PP to increase the plantation of short grasses which are suitable for the hard ground available near to the Project area and simultaneously local species needs to be increased within/outside the ML area. The EAC also noted that PP has submitted the closure report dated 27.02.2024 from Regional Office of the Ministry located in Gandhinagar.

After detailed deliberations made by the Project Proponent and the Consultant, the EAC in its 29th EAC (Non-Coal Mining) meeting held during 9-10th May, 2024 **recommended** the proposal under MoEF&CC Notification vide S.O. 1530(E) dated 6th April 2018 and as per the provisions of EIA Notification, 2006 and its subsequent amendments for grant of Environmental Clearance for Mothala Balachod Bauxite Mining

Project with the Production Capacity of 42,000 TPA in the mine lease area of 280.7686 Ha by M/s Gujarat Mineral Development Corporation Limited, located at Villages Balachod, Mothala, Khandai, Tehsil Abdasa, District Kutch, Gujarat subject to the following specific conditions in addition to the standard EC conditions applicable for non-coal mining projects.

