



सत्यमेव जयते

File No.: J-11015/120/2008-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 27/06/2026



To,

Mr. ANOOP SRIVASTAVA
M/s. Tata Steel Limited
Bombay House, 24 Homy Modi Steet, Fort, MUMBAI, MAHARASHTRA, 400001
tsl.env@tatasteel.com

Subject: Katamati Iron Ore Mine (403.3238 ha.) with expansion in Iron Ore Production Capacity from 13.5 Million TPA to 16.2 Million TPA (20 % expansion in 1st phase), Topsoil: 0.0465 Million TPA, OB: from 1.5 Million TPA to 3.17 Million TPA (Total Excavation: 19.37 Million TPA) along with proposed crushing & screening unit 1 x 500 TPH and 2 x 250 TPH and existing crushing & screening 2 x 500 TPH by M/s Tata Steel Limited located at Villages: Deojhar & Thakurani Taluka: Joda, District: Keonjhar, State: Odisha – For Environmental Clearance for first phase of 20% expansion under para 7 (ii) (a) as per OM dated 11th April, 2022 – regarding

Sir/Madam,

This is in reference to your online application No. IA/OR/MIN/559621/2026 dated 10/03/2026, was submitted to this Ministry for the grant of prior Environmental Clearance (EC) under para 7 (ii) (a) as per OM dated 11th April, 2022 for expansion of Katamati Iron Ore Mine (403.3238 ha.) with expansion in Iron Ore Production Capacity from 13.5 Million TPA to 16.2 Million TPA (20 % expansion in 1st phase), Topsoil: 0.0465 Million TPA, OB: from 1.5 Million TPA to 3.17 Million TPA (Total Excavation: 19.37 Million TPA) along with proposed crushing & screening unit 1 x 500 TPH and 2 x 250 TPH and existing crushing & screening 2 x 500 TPH by M/s Tata Steel Limited located at Villages: Deojhar & Thakurani Taluka: Joda, District: Keonjhar, State: Odisha.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC26A00000R5838954N
(ii) File No.	J-11015/120/2008-IA.II (M)
(iii) Clearance Type	Fresh EC
(iv) Category	A

(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Sector	Non-Coal Mining
(vii) Name of Project	Expansion of Katamati Iron Mine of Tata Steel Limited from 13.5 MTPA to 16.2 MTPA (ROM) in the Mining Lease area of 403.3238 Ha
(viii) Location of Project (District, State)	KENDUJHAR, ODISHA
(ix) Issuing Authority	MoEF&CC
(x) Applicability of General Conditions	No

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Common Application Form (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 and recommended by EAC in the 7th meeting held on 02-03/06/2026. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.

5. Based on detailed discussions and presentation made by the Project Proponent and the Consultant, the Expert Appraisal Committee (EAC) in 7th EAC meeting held on 2 - 3rd June, 2026, under the provisions of the para 7 (ii) (a) of EIA Notification, 2006 and its subsequent amendments, **recommended** the proposal of Katamati Iron Ore Mine (403.3238 ha.) with expansion in Iron Ore Production Capacity from 13.5 Million TPA to 16.2 Million TPA (20 % expansion in 1st phase), Topsoil: 0.0465 Million TPA, OB: from 1.5 Million TPA to 3.17 Million TPA (Total Excavation: 19.37 Million TPA) along with proposed crushing & screening unit 1 x 500 TPH and 2 x 250 TPH and existing crushing & screening 2 x 500 TPH by M/s Tata Steel Limited located at Villages: Deojhar & Thakurani Taluka: Joda, District: Keonjhar, State: Odisha subject to the certain specific conditions in addition to the existing standard condition applicable for Non-coal mining projects (Annexure - I).

6. The details of the project as per the information submitted by the Project Proponent are enclosed as Annexure (II).

7. The Ministry has examined the proposal in accordance with the provisions of the Environmental Impact Assessment (EIA) Notification, 2006, and its subsequent amendments, and based on the recommendations of the Expert Appraisal Committee (EAC), the Ministry hereby accords Environmental Clearance (EC) to Katamati Iron Ore Mine (403.3238 ha.) with expansion in Iron Ore Production Capacity from 13.5 Million TPA to 16.2 Million TPA (20 % expansion in 1st phase), Topsoil: 0.0465 Million TPA, OB: from 1.5 Million TPA to 3.17 Million TPA (Total Excavation: 19.37 Million TPA) along with proposed crushing & screening unit 1 x 500 TPH and 2 x 250 TPH and existing crushing & screening 2 x 500 TPH by M/s Tata Steel Limited located at Villages: Deojhar & Thakurani Taluka: Joda, District: Keonjhar, State: Odisha. The clearance is subject to compliance with the specific conditions prescribed for this project, in addition to the standard conditions applicable to non-coal mining projects, as detailed in Annexure I.

8. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006, as amended. 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.

9. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages

and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

10. 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, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

11. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

12. General Instructions:

- a) 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.
- b) 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.
- c) 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.
- d) 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.
- e) 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.
- f) 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.
- g) 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.
- h) PP needs to comply the OM dated 24.07.2024 of MoEF&CC, where it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign "EK Ped Ma ke Naam" (एक पेड़ माँ के नाम) (and the details of the same shall be uploaded in the MeriLife portal (<https://merilife.nic.in>)).

13. This issue with an approval of the Competent Authority.

Copy To

1. The Member Secretary, CGWA, 18/11 Jamnagar House Man Singh Road, Central, Delhi, cgwa@nic.in
2. The Monitoring Cell MoEF&CC, Compliance & Monitoring Division, Indira Paryavaran Bhawan Jor Bagh Road New Delhi, South, Delhi, moefcc-monitoring@gov.in

3. The Member Secretary, CPCB, Parivesh Bhawan Cbd-Cum-Office Complex East Arjun Nagar, East, Delhi, mscb.cpcb@nic.in
4. The District Collector, DC Office, Collectorate Keonjhar Odisha, Kendujhar, Odisha, dm-keonjhar@nic.in
5. The Deputy Director General, Regional Office, "Deputy Director General Of Forests (C) Ministry Of Environment Forest And Climate Change Regional Office A/3 Chandshekharapur Bhubaneswar-751023", N/A, N/A, roez.bsr-mef@nic.in
6. The The Controller General, Indian Bureau of Mines, Indian Bureau Of Mines Indira Bhawan Civil Lines Nagpur-440001, Nagpur, Maharashtra, ccom@ibm.gov.in
7. The Member Secretary, SPCB/PCC, Paribesh Bhawan A-118 Nilakantha Nagar Unit-Viii, Bhubaneswar, Odisha, membersecretary@ospcboard.org
8. The Director General, Directorate General of Mines Safety, Directorate General Of Mines Safety Hirapur Dhanbad Jharkhand 826001, Dhanbad, Jharkhand, dg@dgms.gov.in
9. The Secretary, Ministry of Mines, Ministry Of Mines Shastri Bhawan, New Delhi, Delhi, secy-mines@nic.in

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Conditions

S. No	EC Conditions
1.1	All the environmental safeguards prescribed by the OSPCB vide its memo no. 5624/IND-II-CTE-202 dated 10.04.2026 for the instant proposal in pursuance to the MoEF&CC O.M. dated 14.01.2025 and its subsequent amendment shall be complied with except the green belt requirement regarding 15 m green belt all along its Lease boundary. Compliance in this regard shall be submitted to the Regional Office of MoEF&CC along with the six-monthly compliance report.
1.2	Project proponent shall abide by all orders and judicial pronouncements, made from time to time by the JMFC court, Barbil, Odisha in case number 125 of 2013.
1.3	PP shall ensure that 11.5 MTPA (approximately 70%) of Iron Ore (ROM) is transported through the private railway siding located at Noamundi, while 4.7 MTPA (approximately 30%) is dispatched by road from the Katamati Iron Mine for a period of three years, as committed. Thereafter, transportation of iron ore by road shall not be permitted, and the entire 16.2 MTPA (100%) of Iron Ore (ROM) shall be transported exclusively through the rail mode only.
1.4	PP shall obtain an amendment in the EC dated 04.06.2021 with respect to conditions related to the iron ore beneficiation plant as the same is not proposed to be installed within ML area.
1.5	PP shall implement adequate measures to protect and preserve Betlara Nallah and Mahadev Nallah. No mining, excavation, overburden dumping, mineral stacking/storage, or any other activity that may obstruct, alter, or adversely affect the natural flow of water shall be undertaken within the prescribed safety zone of the nallahs.
1.6	PP needs to ensure that no silt is discharged into the ponds and other waterbodies near the ML area. Proper gabions, check dams, drains and other structures should be erected constructed accordingly.
1.7	The PP shall implement the recommendations, if any, issued by the Irrigation Department/ State Water Resources Department regarding the safeguarding of ponds located within the mining lease area. Monitoring of surface water level & quality of ponds/waterbodies will be carried out regularly through NABL accredited labs and report submitted to Regional office of MoEF&CC along with six

S. No	EC Conditions
	month compliance reports.
1.8	Periodic monitoring of dumps stability shall be carried out. Dump management & monitoring should be done in consultation with DGMS as per MMR.
1.9	PP needs to adopt all possible mitigation measures to prevent ore spillage while transporting the mineral by road. Tarpaulin covered trucks should be used to prevent spillage and emission of dust. Tarpaulin covering should be effective with no scope for any ore mineral spillage left. Geotagged photos of Tarpaulin covering during road transportation should be taken and submitted to Regional office of MoEFCC with six monthly compliance report. Proper training of drivers, operators, and supervisors should be imparted regarding adverse effects of ore spillage on air, water, soil quality, safety and wildlife. An action taken report in this regard needs to be submitted to Ministry's Regional Office with six monthly compliance report.
1.10	PP needs to ensure that the reject/ waste shall be dumped in a scientifically designed and stabilized manner within the lease area, ensuring proper catch drains, toe walls and sedimentation pits to prevent erosion and siltation of nearby areas.
1.11	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of wild animals in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimize stress conditions for wild animals and to avoid Man-Animal conflict. Project Proponent should follow up with State Forest Department regarding implementation of Wildlife Conservation Plan. An implementation report in this regard needs to be submitted to Ministry's Regional office in half yearly compliance report.
1.12	PP needs to undertake water sprinkling along the transportation road, wherever necessary. Wind Screens and avenue plantation needs to be undertaken wherever necessary
1.13	The Project Proponent needs to reduce the dependency upon the ground water, surface water (water from rivers, etc.) and it shall construct a rain water harvesting structure/ water reservoir within the lease area for meeting its day-to-day water needs. An implementation report in this regard needs to be submitted to Ministry's Regional Office.
1.14	The mobile water tankers should be used in the ML area for dust suppression and control mitigation. A logbook of water tankers should be maintained mentioning running hours, kilometre reading, maintenance hours of water tankers for each shift.
1.15	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. Local villagers can be imparted training on mobile, laptop repairing, other electrical appliances repairing, welding, etc. so that they can get employments/ jobs. An implementation

S. No	EC Conditions
	report in this regard shall be submitted to Ministry's Regional Office on an annual basis.
1.16	The Project Proponent shall monitor the air quality, noise level, water quality, water level at the edge of the mine, crusher, near the village and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
1.17	The Project Proponent needs to install the permanent fixed water sprinklers along the haul road and the approach road. Further, 08 nos. of fog canons/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area (and/or other area prone to dust pollution). Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.
1.18	The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed near areas prone to air pollution. PP shall take necessary measures to avoid generation of fugitive dust emissions.
1.19	The Project Proponent needs to explore the possibility to reduce the water consumption by using non-toxic chemicals for haul road dust suppression.
1.20	The Project Proponent needs to complete the entire 7.5 m peripheral plantation, safety barrier plantation and gap plantation within three years. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department.
1.21	The Project Proponent shall make the actual count on the saplings planted (2500/ha) 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. PP shall also ensure a minimum of 20% plantation through Miyawaki technique. A well-qualified horticulture specialist should be kept in the Environment Management Cell of the Project.
1.22	PP shall implement the protective measures proposed in the Environmental Management Plan (EMP) in a time-bound manner, with a capital cost of 3,493 lakh and a recurring cost of 558.3 lakh per annum. The budget earmarked for the same, under both capital and recurring heads, shall be maintained in separate accounts and audited annually. The implementation status, along with the amount spent and supporting documentary evidence, shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
1.23	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.

S. No	EC Conditions
	Any noncompliance or infringement should be reported to the concerned authority.
1.24	The budget proposed for Additional Public Hearing Commitments is 528 lakh. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan within a time frame of 3 years from the date of grant of EC. PP shall submit the progress report regarding the implementation of action plan to concerned RO along with the six-monthly compliance report. PP shall strengthen the existing Primary Health Centre (PHC) & Community Health Centre (CHC) in the study area for better public health. The Project proponent shall ensure that the activities proposed under the public hearing is different from the CSR activities.
1.25	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years from the date of grant of EC.
1.26	Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
1.27	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. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.
1.28	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.
1.29	The Project Proponent shall conduct third party audit of compliance of EC condition at an interval of one year and its report shall be submitted to RO, MoEFCC.
1.30	Project Proponent shall install 2 number of CAAQMS, 1 each in the core zone and the buffer zone, in consultation with the Odisha Pollution Control Board and the same shall be connected to the server of SPCB. The same shall be completed within 1 year from the date of grant of EC. The real time data so generated 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.
1.31	PP should utilise the Oil & Grease Trap for washing of trucks, HEMM operational in their mine project. Disposal of the used oil & drums should be through authorized recyclers and as per rules. Copy of logbook of Oil withdrawn from Oil & Grease Trap should be submitted to the Regional Office of the Ministry.
1.32	PP shall ensure that all type of plastic waste generated from the mines shall be stored separately in

S. No	EC Conditions
	isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 and its amendments. In pursuant to Ministry's OM dated 18/07/2022 PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall be submitted to Ministry's Regional Office.
1.33	Project proponent is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Greenbelt development. The action in this regard shall be submitted concerned RO in six monthly compliance report and the details of the same shall be uploaded in the MeriLife portal (https://merilife.nic.in).
1.34	All other conditions stipulated in the Environmental Clearance issued vide letter no. J-11015/63/2008-IA-II (M) dated 05.08.2021 shall remain unchanged.

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
1.2	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred, PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
1.3	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
1.4	This Environmental Clearance (EC) is subject to orders/ judgment of Honble Supreme Court of India, Honble High Court, Honble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
1.5	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
1.6	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom

S. No	EC Conditions
	suggestion / representation has been received while processing the proposal.
1.7	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."
1.8	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.

2.

S. No	EC Conditions
2.1	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/protected against felling and plantation of such trees should be promoted.
2.2	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

3. Air Quality Monitoring And Preservation

S. No	EC Conditions
3.1	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
3.2	Effective safeguard measures for prevention of dust generation and subsequent suppression (like

S. No	EC Conditions
	regular water sprinkling, metallised 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.

4. Water Quality Monitoring And Preservation

S. No	EC Conditions
4.1	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
4.2	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
4.3	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
4.4	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
4.5	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.

S. No	EC Conditions
4.6	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
4.7	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.

5. Noise And Vibration Monitoring And Prevention

S. No	EC Conditions
5.1	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.
5.2	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
5.3	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.

6. Mining Plan

S. No	EC Conditions
6.1	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.
6.2	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

S. No	EC Conditions
	end-of-life; etc.).

7. Land Reclamation

S. No	EC Conditions
7.1	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
7.2	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.
7.3	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.
7.4	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.

8. Transportation

S. No	EC Conditions
8.1	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.
8.2	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

S. No	EC Conditions
	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].

9. Green Belt

S. No	EC Conditions
9.1	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.

10. Public Hearing And Human Health Issues

S. No	EC Conditions
10.1	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.

11. Corporate Environment Responsibility

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

12. Miscellaneous

S. No	EC Conditions
12.1	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the

S. No	EC Conditions
	conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
12.2	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.
12.3	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.
12.4	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.
12.5	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.
12.6	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
12.7	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Honble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
12.8	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.
12.9	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.
12.10	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

Additional EC Conditions

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.

Annexure-II

Katamati Iron Ore Mine (403.3238 ha.) with expansion in Iron Ore Production Capacity from 13.5 Million TPA to 16.2 Million TPA (20 % expansion in 1st phase), Topsoil: 0.0465 Million TPA, OB: from 1.5 Million TPA to 3.17 Million TPA (Total Excavation: 19.37 Million TPA) along with proposed crushing & screening unit 1 x 500 TPH and 2 x 250 TPH and existing crushing & screening 2 x 500 TPH by M/s Tata Steel Limited located at Villages: Deojhar & Thakurani Taluka: Joda, District: Keonjhar, State: Odisha – Environmental Clearance for first phase of 20% expansion under para 7 (ii) (a) as per OM dated 11th April, 2022

The details of the project as per the information submitted by the Project Proponent : -

i. Project Details:

Name of the Proposal	Expansion of Katamati Iron Mine of Tata Steel Limited from 13.5 MTPA to 16.2 MTPA (ROM) under 7 (ii) (a) up to 20% along in the ML area of 403.3238ha located at Deojhar Village & Thakurani RF, Keonjhar District, Odisha State by M/s Tata Steel Limited.	
Location	Villages	Deojhar & Thakurani RF
	Tehsil/Taluka	Joda
	District	Keonjhar
	State / UT	Odisha
	Latitudes	22°06'40.702"N to 22°08'04.588"N
	Longitudes	85°28'09.213"E to 85°29'59.097"E
	SoI Toposheet No.	73 F/8 & 73 F/12 (F45H8 & F45H12)
Company's Name	Tata Steel Limited	
Accredited Consultant and certificate no. and Validity	Accredited Consultant: M/s Vardan EnviroNet LLP, Certificate No.: NABET/EIA/2326/RA 0284_Rev. 01, Validity: 03 rd June, 2026	
KML file	KML is uploaded on Parivesh 2.0 Web Portal	
Seismic zone	As per SOI; Seismic Zones of India Map IS: 1893 (Part I) - 2002 Zone II: Low Damage Risk Zone (MSK VI or less)	

ii. Category Details:

Category of the project	As per EIA Notification dated 14 th September 2006 as Amended from time to time, the project falls under Category "A".
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Schedule No.	Project or Activity 1 (a) , for “Mining of Mineral” Iron 13.5 MTPA to 16.2 MTPA (ROM) Total excavation (in MTPA)-19.37, Proposed Crusher 3 Nos.(1*500 & 2*250)
Mining lease Area (MLA) (In ha.)	403.3238 ha (360.010 ha Forest & 43.3138 ha Non-Forest Area)
General Conditions (if any)	Yes, Jharkhand-Odisha Inter-state boundary (Adjacent to the Mine Lease area on the Northern side)

iii. Earlier EC Details:

Date of application	Proposal No/ File No	Consideration by EAC	Details of EC	Date of accord
21.03.2005	J-11015/120/2003-IA	-	Katamati Iron Mine (within existing ML area of 403.3238 ha.) with expansion in Production Capacity 2477 TPA to 2 Million TPA	06.05.2005
14.10.2010	IA/OR/MIN/9352/2008	-	Katamati Iron Mine (within existing ML area of 403.3238 ha.) with expansion in Production Capacity 2 Million TPA to 8 Million TPA	26.11.2010
30.08.2017	IA/OR/MIN/9352/2008	18-19 th September, 2017; 23-24 th , October 2017; 21-22 nd June, 2018	Katamati Iron Mine (within existing ML area of 403.3238 ha.) with Amendment in EC for change in ROM	18.01.2019
04.06.2021	IA/OR/MIN/210667/2019	June 28-30 2021	Katamati Iron Mine (within existing ML area of 403.3238 ha.) with expansion in Production Capacity of iron ore from 8 MTPA to 13.5 MTPA (total	05.08.2021

			Excavation: 15 MTPA) along with mineral beneficiation plant of 4 MTPA.	
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iv. Details of Mine Lease in Chronological Manner:

S. No	Prospecting License/ Letter of Intent (LOI)/ Grant of Mine lease and Lr No	Date of the grant	Name of the Mineral & (Major/Minor)	Period of Grant	Granted by	Mine lease area in Ha
1.	Initial Grant (This lease included Joda West, Khondbond & Katamati Blocks)	17/01/1963	Iron Ore (Major)	30	Govt. of Odisha	3154.6055
2.	1 st Extension	17/01/1963	Iron Ore (Major)	20	Govt. of Odisha	3154.6055
3.	2 nd Extension	17/01/1983	Iron Ore (Major)	20	Govt. of Odisha	403.3238
4.	3 rd Extension Supplementary Lease Deed Acc. To MMDR Act 2015 Vide: III(A)SM02/2004/3308/S M, Bhubaneswar, dated: 18.04.2015	17/01/2003	Iron Ore (Major)	Till 31.03.2030	Govt. of Odisha	403.3238

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

Type of Land	As per RoR	As per DGMS
Private land	0.0769 ha	0.0769 ha
Government land	43.2369 ha	43.2369 ha
Forest land	360.01ha	360.01ha
Total Mining lease area (MLA), ha	403.3238 ha	403.3238 ha
Private land for crusher, workshop & other infrastructure outside the MLA	0	0

Land use pattern					
Pre Mining	Parameter			Area in ha	
	Forest land			360.01ha	
	Government Non-Forest			43.2369 ha	
	Water bodies			0	
	Tenancy Land including agricultural, settlement etc			0.0769 ha	
	Total Area			403.3238 ha	
During Mining and post mining	During Mining Land Use Plan		Post Mining Land Use Plan		
	Particular	Area in ha	Plantation (in ha.)	Water Body (in ha.)	Public/ Company Use (in ha.)
	Excavation Area	299.22	232.72	3.19	-
	OB Dump (including top-soil dump)	7.73	7.73	-	-
	Road, Infrastructure, Nallah Diversion, Stock Weighbridge etc.,	46.50	-	-	-
	Tailing Dams	22.56	-	-	-
	Others (Conservation zone/Green Belt / Safety Zone)	27.3138	27.3138		
	Re-grassing of area	-	132.37		-
	Total Area	403.3238	400.1338	3.19	-

vi. Mining Plan Details:

Mining Plan including Progressive Mine Closure Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	MMP-2369/2025-26-IBM_RO_BBS
	Date	17.07.2025
	Mineral & (Major/Minor)	Iron Ore
	Mine Lease Area, Ha	403.3238
	Validity	31.03.2028
Additional information (if any)	Modification of Mining Plan along with Progressive Mine Closure Plan (PMCP) has been approved by IBM, Bhubaneswar vide letter no. MMP-2369/2025-26-IBM_RO_BBS dated 17.07.2025.	

Mining Parameters	Quantitative Description												
Method of Mining	Mechanized Opencast Mechanized												
Drilling/Blasting	The blasting operation is being/will be carried out by system of deep hole blasting using Site Mixed Emulsion (SME) Explosive and Nonel/electronic detonators.												
Geological Reserves	Total Geological Reserve: 144.95 million Tone												
Mineable Reserves	127.44 million Tone												
Breakup of Total Excavation (Topsoil/OB/SB/IB/Mineral Rejects/ Waste, MTPA)	Total Excavation 19.37 MTPA (OB – 3.17 MTPA and Iron Ore – 16.2 MTPA) (Top soil – 0.0465 MTPA)												
Life of mine	~6.7 Years												
Mine Bench Height & Bench Width	Bench Height: 12 m Bench Width: 20 m												
No. of Mine Benches	16												
Existing Depth, m bgl	Pit bottom (western pit) working depth is 612 m RL Pit bottom (eastern pit) working depth is 564 m RL.												
Ultimate Depth of Mining, m bgl	From 738 mRL to 552 mRL (Depth 186 m)												
Ground Water Table, m bgl	519 m RL (111 m bgl)												
Details of ground water intersection	Throughout the course of mining operations ground water table will remain undisturbed and the mining operation will not intersect ground water table.												
Individual bench slope	80 ⁰												
Overall pit slope	37.5 ⁰												
Details of existing/ proposed Crusher	Number of working days = 365 • Effective working hours for crusher = 18 hours (5000 Hrs./ year) • Capacity of crusher <table><tr><th>Sl. No.</th><th>Plant Details</th><th>Capacity</th><th>Operation Status</th></tr><tr><td>1</td><td>Crushing & Screening Plant</td><td>500 TPH</td><td>Existing</td></tr><tr><td>2</td><td>Crushing & Screening Plant</td><td>500 TPH</td><td>Existing</td></tr></table>	Sl. No.	Plant Details	Capacity	Operation Status	1	Crushing & Screening Plant	500 TPH	Existing	2	Crushing & Screening Plant	500 TPH	Existing
Sl. No.	Plant Details	Capacity	Operation Status										
1	Crushing & Screening Plant	500 TPH	Existing										
2	Crushing & Screening Plant	500 TPH	Existing										

	3	Crushing & Screening Plant	250 TPH	Proposed
	4	Crushing & Screening Plant	250 TPH	Proposed
	5	Crushing & Screening Plant	500 TPH	Proposed
Mineral Beneficiation	Not Applicable			
RoM output size	From Primary Crusher: -160.00 to -40.00 mm From Secondary Crusher: -40.00 to -10.00 mm			
Transportation details including capacity of dumper/tipper, mode of transport and distance	PP vide an undertaking dated 12.06.2026 submitted the followings: • Out of the proposed production quantity of 16.2 MTPA (ROM) from Katamati Iron Mine, up to 8 MTPA (ROM) would be processed at the Katamati Iron Mine. Out of this processed ore, 4.7 MTPA would be dispatched by road from the Katamati Iron Mine, while the remaining 3.3 MTPA would be dispatched through the private railway siding located at Noamundi. • The remaining 8.2 MTPA (ROM) from the Katamati Iron Mine would be processed at the adjoining Noamundi Iron Mine of Tata Steel, which shares a common boundary with the Katamati Iron Mine. The processed ore would be dispatched through the private railway siding located at Noamundi. • The transportation of 4.7 MTPA of iron ore by road from the Katamati Iron Mine would be carried out for a period of three years. The installed capacity of the rail loading facility (Rapid Loading System) at the Noamundi Private Siding has already been augmented to 24 MTPA. However, the development of railway infrastructure beyond the Noamundi Private Siding, to be undertaken by Indian Railways, viz., the "Y" junction for engine reversal towards the Odisha sector, Line No. 11 for the Noamundi exchange yard, the new 3rd and 4th lines from Dangoaposi to Sukinda, and the 4th line from Dangoaposi to Adityapur, is yet to be completed. Once this infrastructure is in place, transportation of ore can take place through the Noamundi Private Railway Siding.			

	Accordingly, PP has provided the following transportation arrangement: i. 11.5 MTPA of Iron ore shall be transported through the private railway siding located at Noamundi; and ii. 4.7 MTPA of Iron ore shall be dispatched by road from Katamati Iron Mine for a period of three years. As per the Recommendation of CSIR-NEERI Report on “Carrying Capacity Study for Environmentally Sustainable Iron and Manganese Ore Mining Activity in Keonjhar, Sundargarh and Mayurbhanj districts of Odisha State”. EC Capacity based Suggested Ore Transport Mode (SOTM) as mentioned below: <table><tr><th>Code</th><th>EC</th><th>Suggested Ore Transport Mode</th></tr><tr><td>SOTM 1</td><td>≥ 5 MTPA</td><td>100% by private railway siding or conveyor belt up to public railway siding or pipeline for captive mines and 70% for non-captive mines</td></tr><tr><td>SOTM 2</td><td>Between 3 and <5 MTPA</td><td>Minimum 70% by public railway siding, through conveyor belt and maximum 30% by road - direct to destination or other public railway siding or above option</td></tr><tr><td>SOTM 3</td><td>Between 1 and < 3 MTPA</td><td>Minimum 70% by public railway siding and maximum 30% by road - direct to destination or by other public railway siding or above options</td></tr><tr><td>SOTM 4</td><td><1 MTPA</td><td>100 % by 10/17 Ton Trucks or above options</td></tr></table>	Code	EC	Suggested Ore Transport Mode	SOTM 1	≥ 5 MTPA	100% by private railway siding or conveyor belt up to public railway siding or pipeline for captive mines and 70% for non-captive mines	SOTM 2	Between 3 and <5 MTPA	Minimum 70% by public railway siding, through conveyor belt and maximum 30% by road - direct to destination or other public railway siding or above option	SOTM 3	Between 1 and < 3 MTPA	Minimum 70% by public railway siding and maximum 30% by road - direct to destination or by other public railway siding or above options	SOTM 4	<1 MTPA	100 % by 10/17 Ton Trucks or above options
Code	EC	Suggested Ore Transport Mode														
SOTM 1	≥ 5 MTPA	100% by private railway siding or conveyor belt up to public railway siding or pipeline for captive mines and 70% for non-captive mines														
SOTM 2	Between 3 and <5 MTPA	Minimum 70% by public railway siding, through conveyor belt and maximum 30% by road - direct to destination or other public railway siding or above option														
SOTM 3	Between 1 and < 3 MTPA	Minimum 70% by public railway siding and maximum 30% by road - direct to destination or by other public railway siding or above options														
SOTM 4	<1 MTPA	100 % by 10/17 Ton Trucks or above options														
Generation of Topsoil/OB & its Management during plan period & conceptual period	During plan period Top Soil Generation- 93,000m³ top soil will be generated stored separately and will be used in plantation work. At Conceptual Stage: 0.25 million Tons. OB Generation - 3829977.51 m³ and 9574943.775t. In the current plan period, waste will be disposed in Waste Dump, Backfilling-1 (Pit-1), Backfilling- 2(Pit-2) & Backfilling-3(Pit-4). At conceptual stage: 25.4 million Tons of OB Generation.															

Generation of Mineral Rejects/ Waste & its Management during plan period & conceptual period	During plan period Sub grade/Mineral Reject - Total sub-grade quantity to be generated during plan will be 3978605.94 t. Sub-grade shall be stacked at Sub-grade Stack-1 & Sub-grade Stack-2 which may be re-handled in future for its use in blending with higher grades of iron ore.
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vii. Water Requirement:

Total water requirement	4186 KLD	Fresh water	Surface Water -3895 KLD Mine Sump - 291 KLD
		Treated water	19 KLD
Source	Water is being/will be sourced form Baitarani River and Mine Sump.		
Permission for withdrawal/ intersection along with details of grant and its validity	Permission for Water Withdrawal from Baitarani River from Water Resources Department obtained on 20.10.2021. NOC for Groundwater Abstraction vide NOC No. CGWA/NOC/MIN/REN/3/2025/10892 dated 22.02.2025 and valid till the 09.10.2026.		

viii. Nearest Village/ Town/ Highway/ Interstate boundary/ Railway station/ Water bodies/ Monument/Forest

Particulars	Particular's Name	Distance & Directions
Village	Deojhar	0.20 Km in WSW
	Masurberha	0.83Km in ESE
	Kulum	1.22 Km in SE
	Jojosai	2.52 Km in ESE
	Natosai	2.80 Km in NE
	Kolhahundra	2.90 Km in SE
	Jamkundiya	2.91 Km in SE
	Hundra	3.10 Km in SSE
	Jaharbera	3.37 Km in E
	Hundula	3.93 Km in S
	Nizamsai	3.97 Km in SE
	Noamundi	4.21 Km in NE
	Toretopa	4.25 Km in NE
	Raghosai	4.38 Km in S

Particulars	Particular's Name	Distance & Directions
	Merelgara Padapahar Balita	4.48 Km in N 4.59 Km in NE 4.69 Km in SW
School	- Kuldum Primary School, Kuldum - KMRS Residential School Kulumu - Thakurani U. P School - Dhabaleswar High School, Deojhar - M.E School, Noamundi - P A B M High School Noamundi - Dav Public School , Noamundi - St Marys School - Eklavya Model Residential School Noamundi - Kgbv Noamundi Jharkhand	1.14 Km in SE 1.93 Km in SE 2.29 Km in NW 2.43 Km in S 2.45 Km in NE 2.55 Km in NE 3.39 Km in NNE 4.06 Km in NE 4.46 Km in NE 4.75 Km in NE
Town	Belaipada and Barbil	10 km in South direction
Highway	SH-4	~3.2 Km in North
Interstate Boundary	Jharkhand-Odisha	Adjacent to the mine lease area on the southern side.
Railway Station/Railway line	Noamundi Railway Station	4.5 km in NE direction
Water Bodies/ Other Sensitive Receptors like streams/ nalla/ river/pond	Betlara Nallah Mahadev Nallah Balijhore Nallah Sona river / Kundra Baitarini River Karo River	0.2 km, NW 0.4 km, SW 3.9 km, N 6.3 km, S 8.1 km, SE 10.5 km, W
Forest	- Thakurani RF - Kurta PF - Noamundi PF	Adjacent WSW Adjacent, NE 0.5 km, N

Particulars	Particular's Name	Distance & Directions
	• Pandrasali PF • Jampani PF • Nuia PF • Gundijora PF • Kucchibera PF • Lokesai PF • Dulki PF • Rengabera PF • Kurmrita PF • Uliiburu PF • Baitarani RF • Sidhamath RF	2.5 km, NNW 3.7 km, E 4.4 km, NNW 5.1 km, NNE 6.5 km, NE 7.0 km NE 7.0 km, E 7.0 km, E, 7.4 km, NE 7.4 km, W 8.5 km, SSW 9.5 km, SSW
Mitigation measures proposed for the above sensitive receptors	• Wet drilling facility / Drill with dust extractor shall be provided. • Use of Slurry/SME explosive and delay detonation electronic shall be adopted. • Nonel or similar delay detonation shall be adopted. • Proper design of blast and adopting control blasting. • Regular monitoring of blast by seismograph • Water sprinkling on haul road. • Grader will follow water sprinkler • Plantation along the haul road. • Dry Fog Dust Suppression system • STP has been for expansion • From most of the place water is channelized to the Mine Pit. From other places Check Dams with Settling Pits provided. • Mine water shall be utilized for industrial purpose only. • Garland drains along with Settling tank is being/will be provided. • Retaining Wall at the Toe of the Waste Dump.	

Particulars	Particular's Name	Distance & Directions
	• Proper terracing of the dumps • Biological Reclamation • Use of coir mats on dump slopes • Separate stacking of top soil in earmarked places. • Use of top soil for plantation on waste dump, green belt development and reclamation	
Detail of Diversion proposed or previously diverted (if any) for the above sensitive receptors	Not Applicable	

ix. Presence of Environmentally Sensitive Areas in the Study Area

Forest Land/ Protected Area/ Environmental Sensitivity Zone	Yes/ No	Details of Certificate/ letter issued by the concerned Department mentioning the Lr no, date of grant and remarks
Forest Land within the mine lease area and (if yes) status of Forest Clearance	Yes	Katamati lease comprises of 360.010 ha Forest Land. Forest Clearance Vide File No. 8-1/2018-FC, dated: 09.06.2021 over the entire forest area of 360.01 ha including Safety Zone.
National Park	No	PP has obtained a map duly authenticated by PCCF, WL & DFO, Keonjhar has been obtained on 30.03.2021.
Wildlife Sanctuary	No	
Elephant/Tiger Reserve	No	
Eco-Sensitive Zone (ESZ)/Eco-Sensitive Area (ESA)	No	
Coastal Regulation Zone (CRZ)	No	-
Schedule-I species (No.s and name of schedule-I species with authenticated letter)	Yes	The Wildlife Protection (Amendment) Act, 2022 indicates that there are Schedule-I species identified within the study area, comprising 9 mammals <i>Canis aureus</i> (Jackal), <i>Canis lupus pallipes</i> (Wolf), <i>Elephas maximus</i> (Elephant), <i>Felis chaus</i> (Jungle cat), <i>Hyaena hyaena</i> (Striped Hyena), <i>Hystrix indica</i> (Porcupine), <i>Melursus ursinus</i> (Sloth Bear), <i>Viverricula indica</i> (Small Indian Civet), and <i>Vulpes bengalensis</i> (Indian Fox) , 5 birds <i>Accipiter badius</i> (Shikra), <i>Bubo bubo</i> (Horned Owl), <i>Milvus migrans</i> (Black-eared Indian Kite), <i>Pavo cristatus</i> (Peacock), and <i>Tyto alba</i> (Barn Owl), and 8 reptiles <i>Bungarus caeruleus</i> (Common Indian Krait), <i>Chamaeleon zeylanicus</i> (Chameleon), <i>Eryx johnii</i>
Wildlife Conservation Plan	Yes	

		(John's/Brown Sand Boa), <i>Ptyas mucosus</i> (Rat Snake), <i>Python molurus</i> (Indian Python), <i>Varanus bengalensis</i> (Yellow Monitor Lizard), <i>Varanus flavescens</i> (Monitor Lizard), and <i>Vipera russelli</i> (Russell's Viper). A site-specific wildlife conservation plan has been prepared with budget of 301.968 Lakh and approved by PCCF (Wild Life Management and Bio Diversity Conservation cum Chief Wild Life Warden) vide dated 14.07.2023.
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x. Greenbelt/Plantation Details:

Proposed area for green belt/plantation and no. of saplings proposed	The mine has also proposed to plant additional 22,660 nos. of saplings during the plan period covering an area of 9.0661 Ha.
Budget for green plant & plantation till the end of life of mine.	Rs. 92.8 Lakhs (Rs. 10.235 Lakhs per ha.)
Budget for nursery	Rs. 18.6 Lakhs
Details of existing plantation and its survival rate	At present 67,030 trees have been planted at, covering an area of 19.09 Ha. Survival Rate – 85-90%
No. of tree cuts in the mine lease area and compensatory afforestation	-
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	At present ~17556 saplings have been planted in the 7.5m of safety zone over an area of 7.3 ha, and ~49474 saplings have been planted over non-mineralized zone (in waste dump) over an area of 11.79 ha.
50 m safety zone of nallah, roads, electric lines	-
500 m safety zones of nearest habitation villages	-

xi. Baseline detail:

Baseline Data (Air / Water / Noise / Soil / Hydro geological study/ Traffic Study/ others)	
Period of baseline data collection	March to May 2025

Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Summer
Predominant Wind direction (From)	Southwest (SW)
Ambient Air Quality (no. of locations) and results	10 Results PM₁₀ – 42.1 to 84.8 µg/m³ PM_{2.5} – 18.7 to 52.7 µg/m³ SO₂ – 8.0 to 23.5 µg/m³ NO_x – 13.0 to 40.2 µg/m³ CO – 0.22 to 1.22 mg/m³ O₃ – 8.02 to 25.86 mg/m³
Noise level (no. of locations) and results	10nos. Results Industrial Zone – During Day Time (6:00 AM to 10:00 PM) – 50.34 to 71.25 dB(A) During Night Time (10:00 PM to 6:00 AM) – 41.74 to 52.1 dB(A) Residential Zone - During Day Time (6:00 AM to 10:00 PM) – 45.84 to 49.63 dB(A) During Night Time (10:00 PM to 6:00 AM) – 36.14 to 39.99 dB(A)
Water Quality (no. of locations) and results	10nos ground and surface water Results Ground Water: – pH varies from 7.29 to 7.96, – Total Hardness varies from 124 to 214 mg/l, – Alkalinity varies from 212.22 mg/l to 143.29 mg/l – Total Dissolved Solids varies from 232 to 328 mg/l, – Chlorides – 55.19 to 108.41 mg/L etc. All Parameters are found within the permissible limits. Surface Water: – pH varies from 7.15 to 7.78, – Total Hardness varies from 75.16 to 198.66 mg/l,

	– Total Dissolved Solids varies from 148 to 398 mg/l, – Dissolved Oxygen – 5.2 to 7.1 mg/l etc. All parameters are found within the permissible limits.																																															
Soil Quality (no. of locations) and results	10 nos. Results – pH in the soil varies from 7.42 to 7.91, – Available nitrogen varied from 181.1 kg/ha to 198.08 kg/ha, – Available phosphorus varied from 26.52 kg/ha to 33.96 kg/ha. – Available potassium from 63.6 Kg/ha to 122.7 Kg/ha, – Soluble chlorides varied from 30.5 mg/kg to 49.46 mg/kg. – Organic matter concentrations ranged from 0.7% to 0.94 %																																															
Hydro geological study and results	10																																															
Traffic study (no. of locations) and results	No. of locations 3 <table><tr><th>S. No</th><th>Code</th><th>Road</th></tr><tr><td>1</td><td>T1</td><td>Metalled Road (Near Mine Site)</td></tr><tr><td>2</td><td>T2</td><td>PWD Road (Metalled Road)</td></tr><tr><td>3</td><td>T3</td><td>NH – 520 (Near Bileipada)</td></tr></table> Summarized Traffic Data T1 to T3 Point Number of Vehicles/days <table><tr><th>Sl. No.</th><th>Vehicle Type</th><th>T1</th><th>T2</th><th>T3</th></tr><tr><td>1</td><td>Trucks</td><td>187</td><td>764</td><td>1564</td></tr><tr><td>2</td><td>Agriculture tractors/LCV</td><td>2</td><td>8</td><td>86</td></tr><tr><td>3</td><td>Bus</td><td>0</td><td>3</td><td>94</td></tr><tr><td>4</td><td>Cars</td><td>91</td><td>95</td><td>1106</td></tr><tr><td>5</td><td>2-Wheeler</td><td>246</td><td>940</td><td>2146</td></tr><tr><td colspan="2">Total</td><td>526</td><td>1810</td><td>4996</td></tr></table> Summarized Traffic Data T1 to T3 Point Total Number of Vehicle (PCU)/day	S. No	Code	Road	1	T1	Metalled Road (Near Mine Site)	2	T2	PWD Road (Metalled Road)	3	T3	NH – 520 (Near Bileipada)	Sl. No.	Vehicle Type	T1	T2	T3	1	Trucks	187	764	1564	2	Agriculture tractors/LCV	2	8	86	3	Bus	0	3	94	4	Cars	91	95	1106	5	2-Wheeler	246	940	2146	Total		526	1810	4996
S. No	Code	Road																																														
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Sl. No.	Vehicle Type	Passenger Car Unit (PCU) Factor	T1	T2	T3
1	Trucks	3	561	2292	4692
2	Agriculture tractors/LCV	4.5	9	36	387
3	Bus	3	0	9	282
4	Cars	1	91	95	1106
5	2-Wheeler	0.5	123	470	1073
Total		-	784	2902	7540

Proposed Traffic Scenario

S. no	During Mine Operation	Details
1	Total Production Capacity of mine (tons / year)	1,89,00,000
2	Proposed transportation by road (tons / year)	48,00,000
3	Mineral already transported by road (tons / year)	20,00,000
4	Additional mineral to be transported by road (tons / year)	28,00,000
5	No. of working days 330 however the transportation will be done 365 days	365
6	Transportation per day (tons)	7672 t/day
7	Tippers Capacity	35 Tonnes
8	Number of trucks trips/day (220 truck/day*2)	440
9	Total PCU/day	1320

Existing and Operation phase PCU's

Operation Phase PCU's	T1 Point	T2 Point	T3 Point
Existing PCU/day	784	2902	7540
Proposed PCU/day	1320	1320	1320
Total PCU/day	2104	4222	8860

LOS study of the Proposed Project					
Survey Point	Existing Volume + Additional (PCU/day)	Proposed Volume (PCU/day)	Capacity in (PCU/day)	V/C Ratio	LOS
T1	784 + 1320	2104	15000	0.14	A
T2	2902 + 1320	4222	15000	0.28	B
T3	7540 + 1320	8860	35000	0.25	B
<u>Result & Discussion</u>					
• Increase in traffic volume and in V/C ratio at point T1 (near Mine Site), at point T2 (at PWD Road) and at T3 (at NH 520) is worked out for the expansion project (additional transportation of 2.8 MTPA) and compared to that obtained during baseline study. • For transportation of additional 2.8 MTPA of mineral through road 220 nos. of additional trucks (1320 PCU/day) will be added to the present traffic scenario, however, the LOS of the roads will remain same except the at T2 location where the LOS will change from “Excellent” to “Very Good”. Proper traffic management plan will be adopted to maintain the same LOS and minimize the impending impacts, if any.					

- xii. Public Hearing (PH) Details:** As per MoEF&CC OM dated 11.04.2022, the proposed enhancement does not require to conduct Public Hearing, as the proposed expansion is only for 40% increase in the production capacity from the earlier EC. Only the commitment of previous public hearing shall be completely complied and the same shall be strengthen further. The details of last public gearing 8 MTPA to 13.5 MTPA (ROM) with total excavation of 15 MTPA with Mineral Beneficiation Plant of 4 MTPA in the Mining Lease area of 403.3238 ha given below-

Advertisement for PH with date (name of major national daily and one regional vernacular daily newspaper)	28.11.2020
Date of PH	30.12.2020, at 11.00 AM
Venue	Khata No.172, Plot. No. 12 in Deojhar village (Near Katamati Iron Mine) in Keonjhar district, Odisha

Chaired by	Dr. Bhakta Charan Pradhan, Additional District Magistrate, Keonjhar.
Main issues raised during PH	Infrastructure Development, Environment, Plantation, Education, Health and Agriculture
Budget proposed for addressing issues raised during PH over 3 years	Proposed budget for Public Hearing - Rs. 736 Lakhs. Actual Expenditure – Rs. 789.7 Lakhs

xiii. Details of CTE/CTO, Certified Compliance Report, Certified Production Details from the Inception of the Mine:

i. Particulars	Details of Letter along with date of grant and validity			
Consent to Establish	Consent to establish (CTE) under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 for ROM 13.5 million Tons per Annum capacity (total excavation 15 MTPA) along with Mineral Processing Plant of 4 MTPA was granted by Odisha Pollution Control Board vide letter no 538/IND-II-NOC-6571 dated 07.01.2022. The Odisha State Pollution Control Board (OSPCB), vide its letter dated 10.04.2026, provided its recommendations/comments while granting Consent to Establish (CTE) for the proposed expansion of production capacity of the Katamati Iron Mine of M/s Tata Steel Limited from 13.5 MTPA to 16.2 MTPA (ROM) within the mining lease area measuring 403.3238 ha, in compliance with the MoEF&CC Office Memorandum dated 14.01.2025.			
Consent to Operate	Consent to Operate (CTO) under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 has been renewed from time to time. The latest CTO has been granted by the Odisha State Pollution Control Board (OSPCB) vide letter no. 8040/IND-I-CON-185, dated 25.05.2026, and is valid up to 31.03.2027.			
Certified Compliance Report and Inspection date	RO, MoEFCC, inspected site on 11.04.2025 and inspection report issued on 05.05.2025. ATR review report issued by RO, MoEFCC vide letter no 101-482/08/EPE dated 16.09.2025. Action Closure Letter (ACL) wrt Environmental Compliance Status of "Katamati Iron Mine of Tata Steel Limited has been obtained from MoEF&CC vide Letter no F. No. IA-J-11014/ 105/ 2025-IA-I dated 15.01.2026.			
Certified Production Details from the inception of the mine (in tabular form)	Year	EC sanctioned capacity (Tonne)	Actual production (TPA)	Excess production beyond the EC sanctioned capacity

against the EC capacity)	1993-94	5629.034	5624	-
	1994-95	5629.034	4227	-
	1995-96	5629.034	2210	-
	1996-97	5629.034	2516	-
	1997-98	5629.034	0	-
	1998-99	5629.034	0	-
	1999-00	5629.034	0	-
	2000-01	5629.034	0	-
	2001-02	5629.034	0	-
	2002-03	5629.034	100340	94711*
	2003-04	5629.034	337073	331443*
	2004-05	5629.034	1138117	1132487*
	2005-06	1808758.94	1674171	-
	2006-07	2000000	1405569	-
	2007-08	2000000	1369179	-
	2008-09	2000000	1819339	-
	2009-10	2000000	1796463	-
	2010-11	4071232.87	2690294	-
	2011-12	8000000	4459679	-
	2012-13	8000000	63322	-
	2013-14	8000000	5123998	-
	2014-15	8000000	3531983	-
	2015-16	8000000	3799288	-

	2016-17	8000000	5837260	-
	2017-18	8000000	6511383	-
	2018-19	6800000	5026960	-
	2019-20	8000000	4823218	-
	2020-21	8000000	4965635	-
	2021-22	10620000	4525979	-
	2022-23	13500000	7581611	-
	2023-24	13500000	11682921	-
	2024-25	13500000	11277556.482	-
	2025-26	13500000	13213591.608	-
<i>*In accordance with the Orders of the Honorable Supreme Court dt. 02.08.2017 in W.P.C No. 114 of 2014 and WPC No.194 of 2014 (Common Cause Judgment), the Deputy Director of Mines, Keonjhar served a demand note for Rs. 82,70,48,782.00/- (Vide Letter No.4140/Mines dt.02.09.2017) on Katamati Iron mine towards the recovery of the entire cost of excess production between 2002-03 and 2004-05 as shown in above table. Katamati Iron Mine paid the full amount of Rs. 82.7 Crores on 22.12.2017.</i>				

xiv. Rehabilitation & Resettlement (R&R):

R & R details	Not applicable
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xv. Court Case Details:

Court Case, No and its present status	There is one case (Case no. 125 of 2013, JMFC court, Barbil, Odisha for production of iron-ore more than EC permitted quantity) is pending against the project. The status of the case is ongoing. Credible action initiated against PP u/s 15 of EP Act.).
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Undertaking by Project Proponent w.r.t court case	The PP submitted an undertaking dated 15.04.2026, wherein it stated that a case under Section 15 of the Environment (Protection) Act is pending before the Court of J.M.F.C., Barbil (Case No. 125 of 2013) concerning the production of iron ore in excess of the quantity permitted under the Environmental Clearance during the period from 01.04.2003 to 31.03.2005. The PP further stated that, except for the aforesaid case, no litigation is pending against the project, nor has any direction or order been passed by any court of law against the project and/or the land on which the project is operating. It also undertook that the Company shall bear sole responsibility for any such litigation, if any, arising in the future.
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xvi. Affidavit/Undertaking Details:

Affidavit as per Ministry's OM dated 30.05.2018	Project Proponent has submitted the Affidavit 28.01.2026. stating that the company undertakes to comply all the statutory requirement & judgment of Hon'ble Supreme Court order dated 2 nd 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 by Project Proponent in EIA/EMP report	PP has submitted undertaking in EIA/EMP report.
Undertaking by Consultant in EIA/EMP report	Consultant has submitted undertaking in EIA/EMP report
Plagiarism Certificate	Plagiarism Certificate has been submitted in EIA/EMP report, dated 16.02.2026.

xvii. EDS/ADS details (If any):

PP has submitted EDS on 10.03.2026 raised on 13.02.2026		
S. No	EDS	Reply by Project Proponent
1	PP needs to submit an authenticated list of flora and fauna as per the Wildlife (Protection) Amendment Act, 2022.	List of flora and fauna prepared, as per the Wildlife (Protection) Amendment Act, 2022 has been authenticated by DFO Keonjhar vide letter no. 2902 dated 09.03.2026.
2	PP needs to submit a legible copy of EIA/EMP report and annexures.	Legible copy of EIA/EMP report has been uploaded in Part-C "Enclosures". A copy of EIA/EMP report is attached herewith. Legible copy of Annexures has been uploaded separately in Part-C "Additional Document section" (in 7 parts due to size constraints).

xviii. Criteria as per OM dated 11.04.2022:

Sl No.	Criteria as per OM dated 11.04.2022	Compliance
I.	The project should have gone through the public hearing process, at least once, for its existing EC capacity on which expansion is being sought, except those category of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.	Public hearing for the expansion of Katamati Iron Mine from 8 MTPA to 13.5 MTPA ROM was conducted by Odisha State Pollution Control Board (OSPCB) on 30.12.2020, at 11.00 AM. under the Chairmanship of Additional District Magistrate, Keonjhar in Deojhar village (Near Katamati Iron Mine) Keonjhar, District, Odisha.
II.	There should not be change in Category of the project from B2' to 'B1' or 'A' due to proposed modernisation or expansion.	There is no change in the category of the project due to the project. Earlier EC was granted MoEF&CC, under category "A" as per EIA Notification 2006 vide F. No. J-11011/63/2018- IA II (I)) dated 5th August, 2021. Present expansion proposal under 7(ii) is also under Category 'A' as per EIA Notification, 2006.
III.	There is no additional land acquisition or forest land diversion involved for the proposed expansion or there is no increase in lease area with regard to mining vis à-vis the area mentioned in the EC, based on which public hearing has been held earlier	There is no additional land acquisition or no additional forest diversion involved in the project. Mining Lease area of the Mine is 403.3238 ha. which comprises of 360.01 ha. forest land and 43.3138 ha non-forest land. Stage II Forestry Clearance was granted by the Ministry of Environment, Forest & Climate Change (MoEF&CC) under Section-2 of the Forest (Conservation) Act, 1980 for non-forestry use of 360.01 ha of forest land vide letter no File No.8- 1/2018-FC dated 9th June 2021
IV.	The proposed expansion shall not be more than 50% of production capacity as mentioned in the the prior EC, issued on the basis of public hearing held and the same shall be allowed in minimum three phases.	The expansion proposal is for 40% increase (in two phases i.e. 20% increase in each phase) in the production capacity, beyond the capacity for which environmental clearance was granted on 5th August,2021 and Public Hearing was held on 30.12.2020. In the first phase expansion of 20% increase in the production capacities under the exiting EC proposed. In the second phase 40% increase in the production capacities, beyond the capacity for

Sl No.	Criteria as per OM dated 11.04.2022	Compliance
		which environmental clearance was granted. EIA Report prepared for 40% increase in the existing production capacities, providing details at each stage, separately.
V.	Predicted environmental quality parameters arising out of proposed expansion/modernization shall be within the prescribed norms and the same shall be maintained as per prescribed norms.	Fresh baseline data has been collected during March to May 2025 (Summer season). The values of all environmental parameters were found within the prescribed norms. The predicted environmental quality due to the proposed expansion is also found within the prescribed norms and shall be maintained as per the prescribed norms.
VI.	he proposed expansion should not result in reduction in the greenbelt area as stipulated in the earlier EC, or if the existing ratio of greenbelt is more than 33%, after expansion it should not reduce below 33%.	There will be no reduction in greenbelt area after the proposed expansion.
VII.	The project proponent should have satisfactorily complied the conditions stipulated in the existing EC(s) and satisfactorily fulfilled all the commitments made during the earlier public hearing/ consultation proceedings and also the commitments given while granting previous expansion, as may be applicable. This shall be duly recorded in the certified compliance report issued by the IRO/CPCB/SPCB, which should not be more than one year old at the time of submission of application.	The commitments made during the earlier Public Hearing have been complied with and the status of implementation is given in Chapter 7. Earlier EC was granted by MoEF&CC, under category "A" as per EIA notification 2006 vide F.No. J-11015/63/2018- IA II (M) dated 5 th August, 2021. Officials from RO, MoEFCC, Bhubaneswar inspected site on 11.04.2025, inspection report issued by RO, MoEFCC on 05.05.2025. ATR review report issued by RO, MoEFCC vide letter no 101-482/08/EPE dated 16.09.2025. Action Closure Letter (ACL) w.r.t Environmental Compliance Status of "Katamati Iron Mine of M/ s Tata Steel Limited has been obtained from MoEF&CC vide Letter no F. No. IA-J-11014/ 105/ 2025-IA-I dated 15.01.2026.
VIII.	Public Consultation shall be undertaken (if applicable as per table below] by obtaining	As per the table provided under para 5 of the OM dated 11.04.2022, Public consultation is not applicable for the proposed expansion

Sl No.	Criteria as per OM dated 11.04.2022	Compliance
	response in writing, as per para 7 III (ii) (b) of EIA Notification 2006, except those category of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendment	project as the proposal is only for 40% expansion in the production capacity in two phase (20% in each phase) from the EC was granted in 2021.
IX.	effluent monitoring including air quality monitoring systems as specified in the existing EC, if stipulated, should have been installed.	The Continuous Ambient Air Quality monitoring system is installed at Viewpoint and Pit office in Core Zone and Noamundi Sports Complex in Buffer Zone for monitoring of PM2.5, PM10, SO2, NOx and CO and connected with online servers of OSPCB & CPCB.
5	Subject to the fulfilment of the conditions at Para 4 (i) to (viii) above, following procedure shall be adopted for processing the application for considering expansion of proposed project up to 50% of capacity as mentioned in the existing EC, in minimum three phases under para 7(ii)(a) of EIA Notification, 2006.	This falls under Scenario-II.
6	Project Proponent shall apply in the requisite form on the PARIVESH Portal under para 7(ii) of EIA Notification 2006, along with EIA/ EMP reports based on standard ToRs and Public consultation report, if applicable. The concerned EAC/SEAC shall appraise the project proposal and it may prescribe additional sector specific and/or other environmental safeguards after due diligence, as required.	Online Application has been submitted through PARIVESH portal Vide online proposal No. IA/OR/MIN/559621/2026.
7	Other statutory requirements like Consent to Establish/Operate, Clearance from CGWA, approval of Mining Plan, Mine Closure	Consent to Operate (CTO): Granted by State Pollution Control Board, Odisha vide letter No

Sl No.	Criteria as per OM dated 11.04.2022	Compliance
	Plan, Mine Closure Status Report, approval of DGMS, Forest Clearance, Wildlife Clearance, etc., if applicable, are to be satisfactorily fulfilled at the time of application.	8040/IND-I-CON-185 dated 25.05.2026 and is valid up to 31.03.2027. Forest Clearance (FC): Entire lease is located within 403.3238 ha that consists of 360.01 ha of Forestland and 43.2369 ha of non-forest land. FC for 360.01 ha of forestland granted vide letter no. 8-1/2018-FC, Dt.09.06.2021. Mining Plan: Approved by IBM vide letter No. MMP-2369/2025-26-IBM_RO_BBS dated 17.07.2025, which is valid till 31.03.2028. Ground water drawl permission: NOC issued for drawl of 386 KL/Day of water vide NOC No. CGWA/NOC/MIN/REN/3/2025/10892, dated: 22.02.2025 and is valid till 09.10.2026. Mine Closure Plan: Not Applicable as it is an operational mines. DGMS Approval: Permission under Regulation 106(2)(b) of the Metalliferous Mines Regulations, 1961 to work with deep hole blasting and deployment of Heavy Earth Moving Machineries for excavation, digging, and removal of ore and overburden Vide No.330127 SEZ ChaibasaRegion Perm 2022 250088, dated: 04.10.2022
8	The projects that do not qualify with the above requirement shall continue to be considered on a case-to-case basis by the concerned EAC/ SEAC as per the provisions of para 7(ii)(a) who will decide whether Environment Impact Assessment and public consultations need to be carried out.	Noted.
9	Those projects which involve modernization/change of product mix with increase in production capacity shall be considered as per	This falls under Scenario-II.

Sl No.	Criteria as per OM dated 11.04.2022	Compliance
	Scenarios-II to IV of the table above.	
10	This O.M. is issued in supersession of OM J-11015/224/2015-IA.II (M) dated 15.09.2017 and O.M. No. 1A3-22/23/2021-IA.III [E167077] dated 20.10.2021 and with the approval of the Competent Authority.	Noted.

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

Sl. No.	Environmental Protection Measures	Quantity	Capital Cost Rs. in lakhs			Recurring Cost Rs. in lakhs/year
			1 st Year	2 nd Year	3 rd Year	
1	Air Pollution Control Measures					
	Deployment of Additional Road sweeping machine	1 No	80	--	--	40.00
	Construction of Truck Loading System	4.7 MTPA capacity	600	600	--	
	Augmentation of Truck parking plaza (Rest shelters, drinking water, Bathrooms etc.)	Facility for additional 250 trucks	100	100	--	-
	Installation of Sensor based Water Sprinkling on Haul Road (upgradation of existing 1 KM length water sprinklers & installation of new water sprinklers of length 1 KM)	2 KM	80	120	--	8.0
	Tarpaulin covering station	2 Nos.	30	30	--	-
	Installation of Wind breaking walls	600 m.	60	60	80	-
	Road Repairing cost (8 KM length)	8 KM	250	250	250	160

Sl. No.	Environmental Protection Measures	Quantity	Capital Cost Rs. in lakhs			Recurring Cost Rs. in lakhs/year
			1 st Year	2 nd Year	3 rd Year	
	Development of green belt/Avenue Plantation along the mineral transportation road	5 KM	10	10	15	6
	Deployment of EV Fleet in mines	2 Loaders	200	200	-	
	Installation of new wheel washing system	1 nos.	50	--	--	
	Installation of DFS & Mist cannon system	3 lot	20	10	--	6.0
	Water Sprinkling on Haul roads and transportation roads	-	--	--	-	95
	Retrofitted emission control device for DG sets	2 Nos.	6	6	--	2.0
	Sub Total (A)		1486	1386	345	317.0
2.	Water Pollution Control Measures					
	Sewage Treatment Plant (20 KLD)	1 No.	25	-	-	2.0
	Implementation of Run-off management measures					
	i. Retaining Wall	1054 m ³	3	6	8	0.5
	ii. Garland drains	1064 m	--	--	--	2
	iii. Settling ponds	4 Nos.	4	4	--	2
	iv. Check dams	4 Nos.	5	5	--	0.5
	Rainwater Harvesting	1 No.			-	15
	Sub Total (B)		37	15	8	22.0
3.	Noise Pollution Control Measures					
	Acoustic Enclosure or Separate housing for DG Set	2 nos.	5	5	--	--
	Sub Total (C)		5	5	--	-
4.	Miscellaneous					
	Conducting Scientific Studies (Feasibility study for wind mills, utilization of BHJ, Slope stability, blast vibration & emission load etc.)	5 studies	15	85	54	--

Sl. No.	Environmental Protection Measures	Quantity	Capital Cost Rs. in lakhs			Recurring Cost Rs. in lakhs/year
			1 st Year	2 nd Year	3 rd Year	
	Environment Monitoring program		--	--	-	61.7
	Maintenance of Online Environment Monitoring Systems (CAAQMS, Noise, Piezometer, Meteorological station etc.)	1 Online Noise Meter	5.0	--	--	59.6
	Occupational Health & Safety	1 lot	10	10	9	28.0
	Greenbelt development and landscaping	20000 saplings	2	8	8	70.0
	Sub Total (D)		32	103	71	219.3
	Year Wise Total (A+B+C+D)		1560	1509	424	558.3
	Grand Total		3493			558.3

xx. Additional Public Hearing Commitments for Proposed 20% Expansion:

Sl. No.	Activities	Particulars/PH Requirements	Qty	FY27	FY28	FY29	Total
1	Education	Construction of School Infrastructure (Boundary wall, Class rooms, Library)	3 schools	10	30	20	60
2	Education	Development of community Library and study centers	1 no.	5	10	5	20
3	Education	Provision of Digital boards and computers in community schools	20 nos.	10	25	15	50
4	Livelihood	Development of mushroom fields and training to farmers	100 nos.	5	15	5	25
5	Livelihood	Support for Entrepreneurship development	Lumpsum	10	25	15	50
6	Water and Public Sanitation	Rainwater harvesting structures	10 nos.	10	15	15	40
7	Water and Public Sanitation	Providing toilets in community buildings with water arrangements	15 nos.	10	25	15	50
8	Water and Public Sanitation	Providing toilet facility with water arrangements in schools	15 nos.	10	25	15	50

Sl. No.	Activities	Particulars/PH Requirements	Qty	FY27	FY28	FY29	Total
9	Agriculture	Agri-based training (organic farming, horticulture)	10 nos.	2	5	3	10
10	Agriculture	Construction of vermicompost pits	50 nos.	5	15	5	25
11	Infrastructure Development	Development of community playground	1 no.	10	25	15	50
12	Infrastructure Development	Provision of solar street lights	50 nos.	2	5	3	10
13	Infrastructure Development	Construction and maintenance of village roads	Lumpsum	10	25	15	50
14	Health care	Free medical health camps (general, eye, dental, gynecology)	10 nos.	5	10	5	20
15	Health care	Mobile medical units for remote villages	Lumpsum	3	10	5	18
	Total Expenditure			107	265	156	528

xxi. Details of Project Cost and Employment:

Particulars	Details
Total Cost of EMP (Capital Cost of EMP + capital cost of Public Hearing)	Total cost of EMP Rs. 4021 Lakhs [Rs. 3493 Lakhs (EMP) + Rs. 528 lakhs (Public Hearing)]
Project Cost	310 Crores
Employment (Nos)	Existing- 624 persons After 1 st Phase Expansion: 767 After 2 nd Phase Expansion: 916

xxii. Environmental Safeguards of OSPCB in terms of MoEF&CC OM dated 14/01/2025:- OSPCB vide letter dated 10.04.2026 submitted the following recommendations/ environmental safeguards:

General

1. The mine shall comply to the provisions of Environment (Protection) Act, 1986 and the rules made thereunder with their amendments from time to time such as the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended from time to time, Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments thereunder. The mine shall also comply with the provisions of Public Liability Insurance Act, 1991, if applicable.

2. The mine shall apply for grant of Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & 21 of Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board.
3. Mine shall develop & maintain at least **15 m green belt** all along its Lease boundary & at least **7.5 m Green Belt** all around the existing villages in & around Lease area to act as a barrier & to protect from dust. Mines may include at least **1000 numbers of Banyan & Peepal trees each** in its green belt for supporting local biodiversity & environment.
4. Mine shall implement the recommendations of **CSIR-NEERI Nagpur** for sustainable Mining.
5. Utmost care should be taken to avoid cutting of Big trees unless it is unavoidable.

6. Carbon Footprint

In Order to reduce Carbon Footprint of the Mines followings are recommended

- i. Industry must furnish detailed carbon footprint report (Scope I & II) of its Mines for assessment of carbon emissions.
- ii. Provision of belt conveyors/pipe conveyors for internal transportation of Ores (Lumpy/Fines) from Fe Quarry pits to Mineral Stack yard.
- iii. Replacement of Diesel operated Transportation vehicles & Mineral Processing Plants (Crushers & Screens) with Electric/ Hydrogen operated vehicles/systems Tippers/Trucks for transportation of Minerals both internal as well as to the destinations along with other internal domestic transportation.
- iv. Installations of windmills/ Solar Power Plants to meet at least 50 % of Domestic power requirements of the Mines and adjoining residential colonies, promoting Renewable Energy utilization.
- v. Implementation of Advance Carbon Sequestration Technologies/methods to proceed towards Net Zero emissions.

7. Circular Economy

The OB being generated by Mines contains BHJ with other materials & get dumped without exploring its further use. Since these BHJ Can be used as Non-magnetic fractions from processing yield ferrosilicon alloys (around 20% silicon) for metallurgical uses, reducing reliance on high-grade ores and silica. So the Mines may be asked to

- i. Explore the feasibility of utilization of BHJ in its downstream.
 - ii. Also explore other materials available in the OB to further use in its downstream.
 - iii. Remaining wastes shall be used in back filling the quarry pit by properly maintaining the topography of the site as feasible as possible.
8. Mine has to maintain Zero liquid discharge (ZLD) during dry season, Low & moderate rain condition.

9. The mine shall transport at least 70% of Iron by Rail to minimize air pollution problems in the locality. The nearest railway siding Dojhilar may be used for transportation of Iron ore to reduce load on public road.
10. The mine should provide at least six CAAQMS at appropriate locations for monitoring Ambient Air Quality and should be connected to the SPCB, Odisha server, through RTDAS portal.
11. Project must obtain all statutory clearances as well as permission from Central / State Government as applicable from time to time.
12. Adequate measures should be taken for control of noise levels in the work environment of plant (crushing & screening) area so that noise levels shall **not exceed 75 dB (A) during daytime (06:00 AM to 10:00 PM) and 70 dB(A) during nighttime (10:00 PM to 06:00 AM).**
13. Protective barriers shall be provided for the lights to prevent illumination towards the forest area during night hours.
14. Adequate capacity of RO system must be installed for proper treatment of Mine pit water to make it suitable for meeting the Domestic demand of the Mine.
15. Mines should provide in-stream storage check dams (up to 2.0m height) along drainage channels in Lease area at appropriate places as per the Department of Water Resources, Odisha guidelines to manage runoff, reduce sediment transport, support local eco systems and facilitate ground water recharge-achieving Net Zero abstract (withdrawal Vs. Recharge) for ensuring adequate flow in Stream and River.
16. Project proponent must provide a net Barrier of 15m Height of adequate length before Green Belt towards nearby Village / Residential side to contain the fugitive dust to be emitted during transportation & process activities to avoid any dust nuisance in its surrounding residential & other areas.

Water Pollution

1. Mines have to ensure that all natural streams exist within the Mines Lease area or passes adjacent to it should be properly protected & maintained from any contamination. In no case any wash out/Mine effluent shall be allowed to discharge into local streams, Betlara Nallah and Murga Nallah, which ultimately drain into River Baitarani.
2. Mines should explore the use of Quarry pit water of nearby Mines of M/s TATA Steel Ltd/ others to meet the additional water requirements for expansion / Production enhancement of the Mines to maintain Water Neutrality in the Zone.
3. Mine should provide dedicated water supply pipelines to meet water demand of the mines particularly in dry season for effective control of fugitive dust emissions as the present water supply through tankers found to be grossly inadequate.
4. Mines pit drainage water if any shall be adequately treated in ETP / SRTP & shall be reused in Dust suppression / Plantation purposes & meeting Domestic demand to maximum possible extent.

5. Mine has to carry out complete study & preparation of action plan for proper runoff management system of Mines by reputed agencies / In-house shall be submitted to the Board for proper implementation.
6. Mine has to provide proper storm drains all along its internal roads, haul roads terminating at guard ponds/Mine pit to avoid discharge of any untreated reddish runoff to nearby land/water bodies.
7. Run-off Outlets of the Mines shall be properly identified & demarcated along with the receiving body.
8. Run off from Mines area other than leading to Mines pit should be properly channelized & terminated at Masonry Guard Ponds (impervious bottom) with spill way provision at opposite end of inlet for proper settling & Treatment followed by Fabric membrane filtration system for Filtration prior to discharge during heavy rains. Storm Drains should be properly lined with Geosynthetic Cementitious Composite Mats (GCCMs) or concrete canvas / other suitable liners to avoid **percolations & subsequent contamination of Ground water/ Streams/Rivers/ nearby water bodies.**
9. Guard Ponds should be designed to hold the runoff during low & moderate rains (Zero discharge) & in case heavy rain the overflow shall pass through spillway followed by Fabric Filtration system. The Guard ponds should be equipped with Coagulant dosing facilities at Inlet end & Pumping facilities at outlet end to recycle/reuse the runoff for dust suppression/ Plantation/wheel washing systems etc.
10. The proponent shall have valid NOC from CGWA for using ground water before obtaining consent to operate from the Board. The proponent shall apply for allocation of water from Department of Water Resources, Govt. of Odisha in the GO-SWIFT Portal/E-Jalabantan portal.
11. Mines shall provide properly designed Retaining wall of adequate height with garland drain terminating at Guard Pond all-around of OB Dumps, Topsoil Dumps, Iron ores & fines dumps to prevent any wash out & subsequent contamination of nearby water bodies.
12. Mine shall provide diversion drains wherever required at lease boundary to avoid entry of runoff from outside to Mining area in order to avoid contamination of runoff.
13. Mines shall regularly monitor the water quality of the Streams/Nallah/River/Water bodies flowing within & adjacent of the lease area & analysis reports shall be submitted to the Board at least twice a year. Mine has to monitor the groundwater quality of the area at least twice a year.
14. Mine shall install multiple wheels washing facilities in Parallel covering dispatch route to ensure whole body washing of transporting vehicles i.e. Tippers/trucks etc to avoid carryover of dust and mud to Public roads. The wash effluent of wheel washing systems shall be 100% recycled through settling Tanks/ETP.

Air Pollution

1. Mines shall provide adequate capacity Truck Parking Plaza equipped with dust suppression, Run-off management & treatment system within its Lease area on war foot basis to avoid any parking & congestion in Public Roads.

2. Mine shall submit the Transportation Management Plan to avoid any Parking of Trucks/Tippers, etc on public roads prior to go for expansion so that local traffic should not suffer.
3. Mine needs to provide sensor based fixed type sprinklers along major unpaved haul roads & ensure proper water sprinkling on internal unpaved haul roads & Transportation Roads for control of road dust emission during plying of transportation vehicles.
4. Main Haul roads, Approach roads & other internal public roads of the Mines should be concreted & Mine has to deploy adequate nos of Mechanized Road Sweeping Systems (Vacuum type) at main paved Roads, paved parking zones, etc to maintain roads & area dust free.
5. Mines shall explore the possibility of provision of Belt / Pipe Conveyors for transportation of Iron ore from Quarry Pit to Mineral Stack Yard within Lease Boundary to minimize internal transportation through Haul Roads & to reduce air Pollution.
6. The ore stack yards shall be provided with adequate height of Toe wall all around & Rain guns shall be installed at appropriate intervals along Toe wall for dust suppression during dry season
7. Mine must provide **Truck Loading Silos** equipped with DFS to minimize fugitive dust emissions during Loading process.
8. Mobile Crushing & Screening Unit must be installed under covered shed (Temporary) to minimize fugitive dust emissions.
9. Mine must provide and ensure proper functioning of **DFS** at all transfer points of Iron Ore Screening & Crushing Plant to avoid any fugitive dust emissions.
10. Mine must deploy adequate nos. of **Fixed/ mobile Fog cannons** at all dust prone areas, Loading/Unloading areas of the mines for effective control of fugitive dust emissions in order to maintain AAQ within the Limit.
11. The transportation route of Mine from its exit gate to NH 520 (about 8 KM) must be widened & concreted with due permission from the competent authority. Adequate numbers of mechanized road sweeping systems (Vacuum Type) must be deployed to maintain the transportation route dust free, in order to avoid adverse impact on nearby habitations/ villages due to transportation activities.
12. A green belt (as Barrier) on both sides of the transportation route should be developed & maintained to protect the surroundings from dust & vehicular exhaust.
13. The mine shall carry out plantation at inactive dumps and other vacant areas.

Solid & Hazardous Wastes Management

1. The Mines area should be declared as **single use plastic free area**.
2. The Garbage/solid wastes to be generated from the Mines should be collected & disposed off in accordance with the provision under Solid Waste Management Rule 2022.
3. Hazardous wastes shall be disposed off in accordance with the Provisions under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 and its amendments thereof.

4. Mine has to furnish its complete OB Management plan so that Haphazard OB dumps & subsequent Pollution problem can be avoided.
5. The unit shall develop dedicated facilities for 90 days storage of Hazardous & Other Wastes to be generated & such wastes shall be disposed off in accordance with the provisions under the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 and its amendments thereof.

