

Your (**Half Yearly Compliance Report**) has been **Submitted** with following details

Proposal No	IA/OR/MIN/123688
Compliance ID	1229660585
Compliance Number(For Tracking)	EC/M/COMPLIANCE/1229660585/2026
Reporting Year	2026
Reporting Period	01 Jun(01 Oct - 31 Mar)
Submission Date	31-05-2026
RO/SRO Name	Shri Senthil Kumar Sampath
RO/SRO Email	agmu156@ifs.nic.in
State	ODISHA
RO/SRO Office Address	Integrated Regional Offices, Bhubaneswar

Note:- SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, ODISHA with Notification to Project Proponent.



To,
Deputy Director General of Forests (C), Ministry of Env., Forest and Climate Change,
Integrated Regional Office, A/3, Chandrasekharpur, Bhubaneswar-751023
Email: roez.bsr-mefornic.in

Ref: MD/ENV/401/104/2025
Date: 25.05.2026

Sub.: Half-yearly compliance status report of Environmental Clearance conditions for the period October 2025 to March 2026 in respect of Katamati Iron Mine, M/s Tata Steel Limited.

- Ref:**
1. Environmental Clearance letter no. IA-J-11015/63/2018. IA. II(M) dated: 05.08.2021.
 2. Environmental Clearance letter no. IA-J-11015/104/2011. IA. II(M) dated: 10.06.2013.
 3. Environmental Clearance letter no. IA-J-11015/159/2007. IA. II(M) dated: 26.08.2008.
 4. Environmental Clearance letter no. IA-J-11015/49/2003. IA. II(M) dated: 06.04.2005.
 5. Environmental Clearance letter no. IA-J-11015/5/90. IA. II(M) dated: 18.05.1994.

Dear Sir,

Kindly find attached herewith the half-yearly compliance status report in respect of the stipulated Environmental Clearance conditions of Katamati Iron Mine, Mis Tuta Steel Limited for the period from October 2025 to March 2026.

We trust that the measures taken towards environmental safeguards comply with the stipulated environmental conditions. We look forward to your further guidance which will certainly help us in our endeavor to further improve our Environmental Management practices,

Thanking You
Yours Faithfully,

Area Manager (Environment), OMQ

Encl: As Above

TATA STEEL LIMITED

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**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

ENVIRONMENTAL CLEARANCE NO. IA-J-11015/63/2018-IA-II(M) DATED 05.08.2021

(Period of Compliance: October 2025 to March 2026)

Sl	Specific Conditions	
i.	Environmental Clearance (EC) shall be valid up to the lease period only i.e. up to 31.03.2030.	Noted.
ii.	The budget of Rs. 7.36 Crores to address the concerns raised by the public including in the public hearing to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes.	Complied. All the commitment made during PH are implemented. Details of PH commitments is attached as Annexure-I .
iii.	The Project Proponent shall undertake the adequate plantation in peripheral zone as well as gap plantation with the seedling of 6-8 ft height with at least 90% survival rate to control the dust at source and should be completed within 2 years from the date of commencement of mining operations. Causalities of the previous year should be replaced other than the saplings proposed to be planted every year	Complied. Adequate number of saplings have been planted in the safety zone. A total of 10147 nos. of saplings were planted during the period April 2025 to March 2026. Photographs of Plantation is attached as Annexure-II .
iv.	The Project Proponent shall make efforts for Sal plantation for restoring the mine lease area. PP shall provide tree guard to maintain the early stages of plant growth.	1200 nos. of sal plantation was done during the period 2023-25 and 600 nos. of sal plantation is done during the FY 2025-2026 along with maintenance activities and tree guard are provided to maintain early stages of plant growth.
v.	Geomats to be used as erosion control blanket which should be biodegradable and accordingly validated through testing from a recognized institution/ laboratory.	Geo-textile coir mat (bio-degradable) has been laid on the slope of sub grade dumps along with grass seeding to minimize soil erosion from the dump. Validation of the coir-mat has been done from "AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION" and the test report of the same is attached as Annexure-III .
vi.	The conservation plan in consultation with the Forest Department shall be implemented and compliance of the same shall be submitted to IRO of MoEF and CC before 1st July of every year.	The new conservation plan has been approved vide letter no. 7924/CWLW-FDWC-FD-0021-2021 dated 14 th July 2023. The compliance status of the activities to be executed by user agency is attached as Annexure-IV .
vii.	Project proponent shall furnish a certificate from DFO regarding satisfactory compliance of site specific wildlife conservation plan.	DFO while replying to an EDS raised by MoEF and CC, New Delhi has replied to a quarry regarding "Status of implementation of various scheme/plan (RWMP/SSWCP)" in his reply DFO has mentioned "The user agency has deposited, an amount of Rs. 301.968 lakh in CAMPA account through online vide UTR no. HDFCR52023081780432709 dated 17.08.2023 to take up the interventions by the Forest Department. The interventions earmarked to take up by the Forest Department, will be carried out component wise on receipt of required funds from the PCCF and HoFF, Odisha. The activities to be undertaken by

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

		Project proponent is being complied.” The summary of the same of the letter by DFO is attached as Annexure-V .
viii	The Project Proponent shall obtain the Renewal of NOC from CGWA for withdrawal of ground water before undertaking mining operations.	The mine has been granted renewal of CGWA NOC (381m ³ /day) issued vide no. CGWA/NOC/MIN/REN/3/2025/10892, dated 22.02.2025 which is valid till 09.10.2026.
ix.	The Project Proponent should undertake the soil conservation/ restoration activity in a way that the habitats can be restored.	Soil conservation/ restoration efforts such as soil amendments with cow-dung and manure, mulching, grass cover development, management of invasive species/ exotic species as well as selection of only native species for plantation, etc. are done so that habitats can be restored.
B. 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:		
1)	Project Proponent and Department of Steel and Mines, Govt. of Odisha shall ensure the implementation of recommendations of carrying capacity study report conducted by CSIR-NEERI w.r.t. mining proposal of Iron Ore and/or manganese in the State of Odisha.	Noted and shall be complied.
2)	Department of Steel and Mines, Govt. of Odisha should prepare 5 years regional plan for annual iron ore requirement from the state, which in turn shall be met from different mines/zones (e.g. Joda, Koira.) in the state. Accordingly, sustainable annual production (SAP) for each zone/mine may be followed adopting necessary environmental protection measures.	TSL will adopt the necessary environmental protection measures and abide by the sustainable annual production limit mentioned in regional plan prepared by Department of Steel and Mines, Govt. of Odisha.
3)	Project Proponent shall construct the cement concrete road from mine entrance and exit to the main road with proper drainage system and green belt development along the roads and also construction of road with minimum 300 m inside the mine. This should be done within one year for existing mines and new mine should have since beginning. The Department of Steel and Mines, Govt. of Odisha should ensure the compliance and should not issue the Mining Permits, if mine lease holder has not constructed proper cement concrete road as suggested. This Environmental Clearance for the expansion project shall be operated only after the compliance of the above-mentioned specific condition.	Construction of cement concrete road of length 400 meters within the mine near mine entrance is complete, Photographs is attached as Annexure-VI .
4)	The Committee observed that as per the recommendations of NEERI report the PP needs to do regular vacuum cleaning of all mineral carrying roads aiming at "zero dust re-suspension" within 3 months. This Environmental Clearance for the	Work order for deployment of mechanical sweeper has been placed and the mechanical sweeper has been deployed. Photograph of vacuum sweeping machine is attached as Annexure-VII .

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	expansion project shall be operated only after the compliance of the above-mentioned specific condition.	
5)	Project Proponent shall monitor the environmental quality parameters as per EC and CTE/CTO conditions, and implementation of suggested measures for control of road dust and air pollution. Odisha State Pollution Control Board has to ensure the compliance of CTE/CTO. Regional office of the MoEF and CC, Bhubaneswar shall monitor the compliance of the EC conditions. Regional office of the Indian Bureau of Mines (IBM) shall monitor the compliance of mining plan and progressive mine closure plan. Any violation by mine lease holder may invite actions per the provisions of applicable Acts.	Mine is ensuring the strict compliance to monitoring of environmental quality parameters and implementation of air pollution control measures as per EC and CTE/CTO conditions. Katamati iron mine is regularly submitting the half-yearly EC and compliance reports to respective authorities. TSL will continue to furnish the required information and extend all support during the site visits by statutory agencies.
6)	Project Proponent shall ensure the compliance of Suggested Ore Transport Mode (SOTM) with association of the State Government of Odisha. All existing mines should ensure adoption of SOTM within next 5 years. New mines or mines seeking expansion should incorporate provision of SOTM in the beginning itself, and should have system in place within next 5 years.	Being Complied. Out of 13.5 MTPA total production, approximately 9.5 MTPA of ROM shall be processed in tandem with Noamundi ore in the processing plant located at Noamundi and conveyed through closed conveyor belts to the private railway siding at Noamundi. 11.5 MTPA of final product from Katamati is dispatched from the private railway siding and other public railway sidings. Approximately 4 MTPA ROM shall be processed at the processing plant located at Katamati. The finished product shall be continued to be sent to the steel plants through railway siding either through Noamundi or through public siding at Deojhar or by road directly to the steel plants. Currently around 2 MTPA processed ore (maximum) is dispatched by trucks due to a shortage of racks and wagon availability from Railway.
7)	The State Govt. of Odisha shall ensure dust free roads in mining areas wherever the road transportation of mineral is involved. The road shoulders shall be paved with fence besides compliance with IRC guidelines. All the roads should have proper drainage system and apart from paving of entire carriage width the remaining right of way should have native plantation (dust capturing species). Further, regular maintenance should also be ensured by the Govt. of Odisha. Progress on development of dust free roads, implementation of SOTM, increased use of existing rail network, development of additional railway network/conveyor belt/ pipelines etc. shall be submitted periodically to Regional office of the MoEF and CC.	Noted.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

8)	Project Proponent shall develop the parking plazas for trucks with proper basic amenities/ facilities inside the mine. This should be done within one year for existing mines and new mines should have since beginning. This Environmental Clearance for the expansion project shall be operated only after the compliance of the above-mentioned specific condition.	Parking area for outside trucks with all amenities like drinking water facility, rest shelter with urinal facility, illumination etc. has been provided.										
9)	Department of Steel and Mines shall ensure the construction of NH 215 as minimum 4 lane road with proper drainage system and plantation and subsequent regular maintenance of the road as per IRC guidelines. Construction of other mineral carrying roads with proper width and drainage system along with road side plantation to be carried out. This shall be completed within 2 Years.	TSL will extend any support if desired by the State Government.										
10)	Regular vacuum cleaning of all mineral carrying roads aiming at "Zero Dust Re suspension" shall be adopted by PWD / NHAI/ Mine Lease Holders within a time Period of 3 months for existing roads. This Environmental Clearance for the expansion project shall be operated only after the compliance of the above-mentioned specific condition.	Work order for deployment of mechanical sweeper has been placed and the mechanical sweeper has been deployed. Photograph of vacuum sweeping machine is attached as Annexure-VII										
11)	In case the total requirement of iron ore exceeds the suggested limit for that year, permission for annual production by an individual mine may be decided depending on approved EC capacity (for total actual dispatch) and actual production rate of individual mine during last year or any other criteria set by the State Govt., i.e. Dept. of Steel and Mines. Department of Steel and Mines in consultation with Indian Bureau of Mines-RO should prepare in advance mine-wise annual production scenario so that demand for iron ore can be anticipated, and actual production/dispatch does not exceed the suggested annual production.	TSL will abide by the guidelines issued by the Department of Steel and Mines, Govt of Odisha in this regard. The production for the last years are as follows <table border="1" data-bbox="862 1079 1295 1255"> <thead> <tr> <th>Year</th> <th>ROM Production</th> </tr> </thead> <tbody> <tr> <td>2022-23</td> <td>7581611 MT</td> </tr> <tr> <td>2023-24</td> <td>11682921 MT</td> </tr> <tr> <td>2024-25</td> <td>11270000 MT</td> </tr> <tr> <td>2025-26</td> <td>31210000 MT</td> </tr> </tbody> </table>	Year	ROM Production	2022-23	7581611 MT	2023-24	11682921 MT	2024-25	11270000 MT	2025-26	31210000 MT
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12)	R and D studies towards utilization of low-grade iron ore should be conducted through research/academic institutes like IMMT, Bhubaneswar, NML, Jamshedpur, and concerned metallurgical departments in IITs, NITs etc., targeting full utilization of low-grade iron ore (Fe content upto 45% by 2020 and upto 40% by 2025). In fact, life cycle assessment of whole process including environmental considerations should be done for techno-economic and environmental viability. R and D studies on utilization of mine wastewater having high concentration of Fe content for different commercial applications in industries such as cosmetics, pharmaceutical, paint industry	R and D studies has been carried out like Selective flocculation, Dense media separation, Slime briquette, Haver hydroclean, high gradient magnetic separation through Tata steel's R and D department. As per the study Dense media separation plant is proposed to be installed. At present, low grade iron ore are being beneficiated using hydro-cyclone, jigging at neighboring Noamundi Iron mine. There is no beneficiation plant present in Katamati Iron mine and there is no generation of mine wastewater containing high concentration of Fe. However, we have conducted a R&D report for waste water generated at Noamundi Beneficiation plant where Katamati ROM is										

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	should also be explored. Responsibility: IBM, Dept. of Steel and Mines, Individual Mine Lease Holders.	being benefited. Once the report is finalized we shall submit the report to RO, MoEFCC.
13)	The mining activity in Joda-Koira sector is expected to continue for another 100 years, therefore, it will be desirable to develop proper rail network in the region. Rail transport shall not only be pollution free mode but also will be much economical option for iron ore transport. The rail network and/or conveyor belt system upto public railway siding needs to be created. The total length of the conveyor belt system/ rail network to be developed from mines to nearest railway sidings by 11 mines in Joda region is estimated to be about 64 km. Similarly, in Koira region, total length of rail network/ conveyor system for 8 mines (under SOTM 1 and 2) is estimated to be around 95 km. Further, it is suggested to develop a rail network connecting Banspani (Joda region) and Roxy railway sidings in Koira region. Responsibility: Dept. of Steel and Mines, Govt. of Odisha and Concerned Mines along with Indian Railways. Time Period: Maximum 7 years (by 2025). The Department of Steel and Mines, Govt. of Odisha should follow-up with the concerned Departments and railways so that proposed proper rail network is in place by 2025.	We will abide by the directions of Department of Steel and Mines, Govt of Odisha in this regard.
14)	State Govt. of Odisha shall make all efforts to ensure exhausting all the iron and manganese ore resources in the existing working mines and from disturbed mining leases/zones in Joda and Koira region. The criteria suggested shall be applicable while suggesting appropriate lease area and sustainable mining rate. Responsibility: Dept. of Steel and Mines, Govt. of Odisha.	We will work according to the instructions given by the Department of Steel and Mines, Govt of Odisha in this regard.
15)	Mining Operations/Process Related: Project Proponent shall implement the following mitigation measures: (i) Appropriate mining process and machinery (viz. right capacity, fuel efficient) should be selected to carry out various mining operations that generate minimal dust/air pollution, noise, wastewater and solid waste. e.g. drills should either be operated with dust extractors or equipped with water injection system. (ii) After commencement of mining operation, a study should be conducted to assess and quantify emission load generation (in terms of air pollution, noise, waste water and solid waste) from each of the mining activity (including transportation) on annual basis. Efforts should be made to further eliminate/	Being complied. (i) Mining activities are carried out as per IBM approved mining plan. Due diligence is exercised for machinery selection. All drilling machines are equipped with in-built dust extraction/ suppression system which has an interlock which prohibits drilling without water. The photographs of the drilling machine is attached as Annexure-VIII . (ii) The fleet of dumpers has been continually upgraded and currently we only have 100T L and T Komatsu make HD785 dumpers which are fuel-efficient, generate very less noise and contribute to less GHG emissions. Timely maintenance schedule is maintained, and records are maintained. Dust load calculation is being done as per the method

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	<p>minimize generation of air pollution/dust, noise, wastewater, solid waste generation in successive years through use of better technology. This shall be ensured by the respective mine lease holders.</p> <p>(iii) Various machineries/equipment selected (viz. dumpers, excavators, crushers, screen plants etc.) and transport means should have optimum fuel/power consumption, and their fuel/power consumption should be recorded on monthly basis. Further, inspection and maintenance of all the machineries/ equipment/ transport vehicles should be followed as per manufacturer's instructions/ recommended time schedule and record should be maintained by the respective mine lease holders.</p> <p>(iv) Digital processing of the entire lease area using remote sensing technique should be carried out regularly once in 3 years for monitoring land use pattern and mining activity taken place. Further, the extent of pit area excavated should also be demarcated based on remote sensing analysis. This should be done by ORSAC (Odisha Space Applications Centre, Bhubaneswar) or an agency of national repute or if done by a private agency, the report shall be vetted/ authenticated by ORSAC, Bhubaneswar. Expenses towards the same shall be borne by the respective mine lease holders. Responsibility: Individual Mine Lease Holders.</p>	<p>formulated by OSPCB. The dust load calculation sheet is attached as Annexure-IX.</p> <p>(iii) A state of the art Fleet Management System has been adopted which gives a real-time information of fuel consumption, productivity and health of the machinery (dumpers, excavators, drills, dozers, etc). This digitalization initiative contributes significantly to monitor and reduce fuel consumption and increase productivity. Further, inspection and maintenance of all the machineries/ equipment/ transport vehicles are being done as per manufacturers instructions/ recommended time schedule and record is maintained. Record of fuel consumption is maintained of monthly basis.</p> <p>(iv) The digital processing of entire lease area is being carried out regularly. The current land use pattern is made by M/s Digital Cartography and Services Pvt. Ltd. the authorized agency by ORSAC, Bhubaneswar. And the LULC report is attached as Annexure-X.</p>
16)	<p>Air Environment Related: Project Proponent shall implement the following mitigation measures: (i) Fugitive dust emissions from all the sources should be controlled regularly on daily basis. Water spraying arrangement on haul roads, loading and unloading and at other transfer points should be provided and properly maintained. Further, it will be desirable to use water fogging system to minimize water consumption. It should be ensured that the ambient air quality parameters conform to the norms prescribed by the CPCB in this regard.</p> <p>(ii) The core zone of mining activity should be monitored on daily basis. Minimum four ambient air quality monitoring stations should be established in the core zone for SPM, PM₁₀, PM_{2.5}, SO₂, NO_x and CO monitoring. Location of air quality monitoring stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board (based on Emission Load Assessment Study). The number of monitoring</p>	<p>i) Fugitive dust emissions from all the sources are being controlled regularly on daily basis. The fugitive dust monitoring report is attached as Annexure-XI. A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large capacity namely 50 KL which can cover the entire the entire width of the haul road has been commissioned. All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system. The photographs of same are attached as Annexure-XII.</p> <p>Mist cannons have placed at strategic points to prevent and control of fugitive dust emission.</p> <p>Ambient air quality conforms to the CPCB norms.</p> <p>ii) 2 nos. Continuous Ambient Air Quality monitoring system installed inside Mining Lease area for monitoring PM₁₀, PM_{2.5}, SO₂, NO_x and CO in the core zone on daily basis.</p> <p>Four manual ambient air quality monitoring stations have been established in the core zone for PM₁₀, PM_{2.5}, SO₂, NO_x and CO monitoring on daily basis. Monitoring is done by NABL accredited lab and the reports are submitted to Board regularly.</p>

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

<p>locations may be more for larger capacity mines and working in larger area. Out of four stations, one should be online monitoring station in the mines having more than 3 MTPA EC Capacity. (iii) Monitoring in buffer zone should be carried out by SPCB or through NABET accredited agency. In addition, air quality parameters (SPM, PM₁₀, PM_{2.5}, SO₂, NO_x and CO) shall be regularly monitored at locations of nearest human habitation including schools and other public amenities located nearest to source of the dust generation as applicable. (iv) Emissions from vehicles as well as heavy machinery should be kept under control and regularly monitored. Measures should be taken for regular maintenance of vehicles used in mining operations and in transportation of mineral. (v) The vehicles shall be covered with a tarpaulin and should not be overloaded. Further, possibility of closed container trucks should be explored for direct to destination movement of iron ore. Air quality monitoring at one location should also be carried out along the transport route within the mine {periodically, near truck entry and exit gate), Responsibility: Individual Mine Lease Holders and SPCB.</p>	<p>AAQ Monitoring report is attached as Annexure-XIII. (iii) We have one CAAQMS station in the buffer zone and the data is transmitted to SPCB server. Manual Ambient Air Quality monitoring at 4 locations (PM₁₀, PM_{2.5}, SO₂, NO_x and CO) is carried out on bi-weekly basis. (iv) Vehicular emission checks of all the wheel mounted HEMMs are done at regular intervals. Maintenance of mining equipment is done on regular basis. It is mandatory for any vehicle entering the mine premises to have a valid fitness certificate. PUC certificates of HEMMs is attached as Annexure-XIV. (v) It is ensured that all the vehicles exiting the mine gate are checked and ensured for tarpaulin cover and are not overloaded. Air quality monitoring is carried out at one location (near Murga gate) along the transport route within the mine lease area.</p>
<p>17) Noise and Vibration Related: Project Proponent shall implement the following mitigation measures: (i) Blasting operation should be carried out only during daytime. Controlled blasting such as Nonel, should be practiced. The mitigation measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented. (ii) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs. (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone. Further, date, time and distance of measurement should also be indicated with the noise levels in the report. The data should be used to map the noise generation from different activities and efforts should be made to maintain the noise levels with the acceptable limits of CPCB (CPCB, 2000) (iv) Similarly, vibration at various sensitive locations should be monitored at least once in month, and mapped for any significant changes due to successive mining operations. Responsibility: Individual Mine Lease Holders.</p>	<p>i) Blasting operation are being carried out during day time only. Blasting is done using the controlled blasting technique. In this regard, one study has been made by CIMFR (Central Mining and Fuel Research Institute), Dhanbad and recommendations therein are being followed. Initiation system is through either NONEL/electronic detonation system so as to ensure minimal ground vibration. Sample blasting vibration monitoring report is attached as Annexure-XV. ii) Adequate measures are taken for control of work noise levels such as all HEMMs have acoustic cabins with air conditioners and the exhaust manifold have silencers. Noisy operations have been identified and persons engaged in such operations are provided with ear plugs/muffs. (iii) Monitoring of Noise level are being done regularly at the identified major sources of noise generation within core zone. Noise mapping has been done for different mineral processing plants. Noise monitoring report is attached as Annexure-XVI. Necessary efforts are made to maintain the noise level within the acceptable limits of CPCB (CPCB, 2000). iv) All efforts are taken to ensure that blast-induced ground vibrations remain within safe limits by using</p>

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

		<p>NONEL/ electronic detonation system. Vibration monitoring is done for every blast and records maintained thereof and their recommendations are strictly followed. CIMFR also studies the ground-vibration and suggests the mine management best blasting practices. Sample blasting vibration monitoring report is attached as Annexure-XV.</p>
18)	<p>Water/Wastewater Related: Project Proponent shall implement the following mitigation measures: (i) In general, the mining operations should be restricted to above ground water table and it should not intersect groundwater table. However, if enough resources are estimated below the ground water table, the same may be explored after conducting detailed geological studies by GSI and hydro geological studies by CGWB or NIH or institute of national repute, and ensuring that no damage to the land stability/ water aquifer system shall happen. The details/ outcome of such study may be reflected/incorporated in the EIA-EMP report of the mine appropriately. (ii) Natural watercourse and/or water resources should not be obstructed due to any mining operations. Regular monitoring of the flow rate of the springs and perennial nallas should be carried out and records should be maintained. Further, regular monitoring of water quality of nallas and river passing thorough the mine lease area (upstream and downstream locations) should be carried out on monthly basis. (iii) Regular monitoring of ground water level and its quality should be carried out within the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring should be carried out on monthly basis. (iv) In order to optimize water requirement, suitable conservation measures to augment ground water resources in the area should be undertaken in consultation with Central Ground Water Board (CGWB). (v) Suitable rainwater harvesting measures on long term basis should be planned and implemented in consultation with CGWB, to recharge the ground water source. Further, CGWB can prepare a comprehensive plan for the whole region. (vi) Appropriate mitigation measures (viz. ETP, STP, garland drains, retaining walls, collection of runoffs etc.) should be taken to prevent pollution of nearby river/other water bodies. Water quality monitoring study should be conducted by State Pollution Control Board to ensure quality of surface and ground water sources</p>	<p>i) Based on observations from nearby wells and water bodies, the water table in the area is about 519 mRL. Whereas, the maximum depth at conceptual stage is considered to be 564 mRL. Hence, throughout the course of mining operations, the ground water table will remain undisturbed and the mining operation will not intersect ground water table.</p> <p>ii) No perennial nala / stream passes through the mining lease area. Regular monitoring of the flow rate of the Jojo nalla and Mahadeo nalla in the surrounding area is being carried out and records are maintained on monthly basis. The water quality report is attached as Annexure- XVII.</p> <p>iii) Regular monitoring of ground water level on monthly basis and its quality on quarterly basis is being carried out within the mine lease area and surrounding areas. A network of dug wells and borewells with piezometers already exists for this purpose. Water quality and Level monitoring report and Piezometer photographs is attached as Annexure-XVIII A and B respectively.</p> <p>iv) During monsoon run-off from mine is directed towards the mines pit and the water is collected in mine pit for recharge and the water stored at mine pit is being used for dust suppression.</p> <p>v) Due to area constraint inside the mine lease area ponds have been constructed in the buffer zone for ground water recharge. Further all the surface runoff generated is directed to mine pit where it is allowed to settle and augment ground water table. The photographs of rain water harvesting ponds constructed in surrounding villages is attached as Annexure-XIX.</p> <p>vi) Appropriate mitigative measures like CETP in adjacent Noamundi has been constructed, retaining walls, garland drains, settling pits has been constructed to prevent pollution of nearby water bodies. photographs are attached as Annexure-XX.</p>

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	<p>on regular basis. The study can be conducted through NABL/ NABET approved water testing laboratory. However, the report should be vetted by SPCB. (vii) Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated in ETP so as to conform to the discharge standards applicable. (viii) Oil and grease trap should be installed before discharge of workshop effluents. Further, sewage treatment plant should be installed for the employees/colony, wherever applicable. (ix) Mine lease holder should ensure that no silt originating due to mining activity is transported in the surface water course or any other water body. Appropriate measures for prevention and control of soil erosion and management of silt should be undertaken. Quantity of silt/soil generated should be measured on regular basis for its better utilization. (x) Erosion from dumps site should be protected by providing geo-textile matting or other suitable material, and thick plantation of native trees and shrubs should be carried out at the dump slopes. Further, dumps should be protected by retaining walls. (xi) Trenches / garland drain should be constructed at the foot of dumps to arrest silt from being carried to water bodies. Adequate number of check dams should be constructed across seasonal/perennial nallas (if any) flowing through the mine lease areas and silt be arrested. De-silting at regular intervals should be carried out and quantity should be recorded for its better utilization, after proper soil quality analysis. (xii) The water so collected in the reservoir within the mine should be utilized for the sprinkling on hauls roads, green belt development etc. (xiii) There should be zero waste water discharge from the mine. Based on actual water withdrawal and consumption/ utilization in different activities, water balance diagram should be prepared on monthly basis, and efforts should be made to optimize consumption of water per ton of ore production in successive years. Responsibility: Individual Mine Lease Holders, SPCB and CGWB.</p>	<p>The water quality monitoring of surface water and ground water is being carried out regularly by NABL accredited laboratory.</p> <p>vii) There is no industrial wastewater being generated at Katamati. Maintenance of HEMMs is done centrally at Noamundi Workshop.</p> <p>viii) A 30 KLD CETP along with Oil and Grease trap is installed to treat all the effluent generated from washing of HEMMs in workshop at Noamundi. This caters to Katamati mine as well. STPs have been installed in the township located in Noamundi mine lease areas. There is no separate colony in the Katamati mine lease area.</p> <p>ix) Through a series of retention wall, garland drain, settling pits and check dams, it is ensured that no silt originating due to mining activity is transported in the surface water course or any other water body. Majority of the run-off generated is diverted into the mining pit.</p> <p>x) Adequate measures to prevent soil erosion like grass plantation/ coir matting on dump slopes are practiced. Further plantation with native species is done on all dump slopes. Dumps are protected by retaining walls.</p> <p>xi) Garland drains are constructed at the foot of the dumps to arrest silt. Check dams have been constructed for retention of suspended solids and allowing flow of clear water. This prevents contamination of outside water bodies from the wash-offs of the lease area. The check dams are periodically de-silted to keep them efficient.</p> <p>xii) The rain water collected in the mine pit is utilized for water sprinkling on haul roads and for plantation activities.</p> <p>xiii) There is zero waste-water discharge by the mine and it will be maintained in the future as well.</p>
19)	<p>Land/ Soil/ Overburden Related: Project Proponent shall implement the following mitigation measures: (i) The top soil should temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long (not more than 3 years or as per provisions mentioned in the mine plan/ scheme). The topsoil should be used for land reclamation and plantation appropriately. (ii) Fodder plots should be</p>	<p>i) Preservation of topsoil: No topsoil generated during the reporting period. Previously generated topsoil has been utilized for the purpose of green belt development, dump stabilization and horticulture activities.</p> <p>ii) Its being followed.</p> <p>iii) OB/ low grade Ore are stacked at earmarked dump sites as per the approved Mining Plan.</p>

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	<p>developed in the non-mineralized area in lieu of use of grazing land, if any. (iii) Over burden/ low grade ore should be stacked at earmarked dump site (s) only and should not be kept active for long period. The dump height should be decided on case-to-case basis, depending on the size of mine and quantity of waste material generated. However, slope stability study should be conducted for larger heights, as per IBM approved mine plan and DGMS guidelines. The OB dump should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles should be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Proper records should be maintained regarding species, their growth, area coverage etc. (iv) Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from mine operation, soil, OB and mineral dumps. The water so collected can be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly de-silted, particularly after monsoon and should be maintained properly. Appropriate documents should be maintained. Garland drain of appropriate size, gradient and length should be constructed for mine pit, soil, OB and mineral dumps and sump capacity should be designed with appropriate safety margin based on long term rainfall data. Sump capacity should be provided for adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and de-silted at regular intervals. (v) Backfilling should be done as per approved mining plan/scheme. There should be no OB dumps outside the mine lease area. The backfilled area should be afforested, aiming to restore the normal ground level. Monitoring and management of rehabilitated areas should continue till the vegetation is established and becomes self-generating. (vi) Hazardous waste such as, waste oil, lubricants, resin, and coal tar etc. should be disposed off as per provisions of Hazardous Waste Management Rules, 2016, as amended from time to time. Responsibility: Individual Mine Lease Holders.</p>	<p>Dump stability studies have been conducted by CIMFR, Dhanbad scientists and as per the recommendation of their experts, the height of the dump are being maintained.</p> <p>The measures for dump management as suggested are already being implemented to take care of any erosion and for its stabilization. The plantation is monitored and maintained till it becomes self-sustaining. The records pertaining to plantation species name, growth, area coverage is maintained at the mine.</p> <p>iv) Garland drains, Check dams and settling pits have been provided at appropriate places to arrest silt and sediment flows to ensure that only clear water will leave from lease boundary. The water rain water collected in mine pit is used for dust suppression and green belt development.</p> <p>The settling ponds and check dam structures are regularly de-silted and maintained properly. Garland drains has been already constructed for the dumps as per the approved mine plan. Settling pits of adequate capacity has already been provided.</p> <p>v) Back filling of mined out area over an area of 12.56 ha. is being carried out as per the approved mining Plan.</p> <p>The afforestation over the OB dump is being done accordingly.</p> <p>vi) Hazardous wastes management is being done as per the provisions of Hazardous Waste Management Rules, 2016. As the maintenance of HEMM is being done at Noamundi Workshop the hazardous waste such as waste oil, lubricants etc. are generated and disposed off at Noamundi Iron mine.</p> <p>The copy of HW Annual Return in Form-IV is attached as Annexure-XXI.</p>
20)	<p>Ecology/Biodiversity (Flora-Fauna) Related: Project Proponent shall implement the following mitigation measures: (i) All precautionary</p>	<p>i) A detailed Site-Specific Wildlife Conservation Plan has been approved vide letter no. 7924/CWLW-FDWC-FD-0021-2021 dated 14th July 2023. And the activities</p>

HALF-YEARLY EC COMPLIANCE REPORT FOR KATAMATI IRON MINE OF TATA STEEL LIMITED

<p>measures should be taken during mining operation for conservation and protection of endangered fauna namely elephant, sloth bear etc. spotted in the study area. Action plan for conservation of flora and fauna should be prepared and implemented in consultation with the State Forest and Wildlife Department within the mine lease area, whereas outside the mine lease area, the same should be maintained by State Forest Department. (ii) Afforestation is to be done by using local and mixed species saplings within and outside the mining lease area. The reclamation and afforestation is to be done in such a manner like exploring the growth of fruit bearing trees which will attract the fauna and thus maintaining the biodiversity of the area. As afforestation done so far is very less, forest department needs to identify adequate land and do afforestation by involving local people in a time bound manner. (iii) Green belt development carried out by mines should be monitored regularly in every season and parameters like area under vegetation/plantation, type of plantation, type of tree species /grass species/scrubs etc., distance between the plants and survival rate should be recorded. (iv) Green belt is an important sink of air pollutants including noise. Development of green cover in mining area will not only help reducing air and noise pollution but also will improve the ecological conditions and prevent soil erosion to a greater extent. Further, selection of tree species for green belt should constitute dust removal/dust capturing plants since plants can act as efficient biological filters removing significant amounts of particulate pollution. Thus, the identified native trees in the mine area may be encouraged for plantation. Tree species having small leaf area, dense hair on leaf surface (rough surface), deep channels on leaves should be included for plantation.</p> <p>(v) Vetiver plantation on inactive dumps may be encouraged as the grass species has high strength of anchoring besides medicinal value. (vi) Details of compensatory afforestation done should be recorded and documented by respective forest divisions, and State Forest Department should present mine-wise annual status, along with expenditure details. Responsibility: Individual Mine Lease Holders and State Forest and Wildlife Department.</p>	<p>proposed are being complied. The detailed implementation status of SSWLCP is attached as Annexure-IV.</p> <p>ii) We are taking all the suggested measures like selection of the correct local species mix, fruit-species plantation, etc. to enhance the biodiversity of the region.</p> <p>iii) Green belt development done is monitored till it becomes self-sustaining. Relevant records as mentioned are being maintained by the horticultural specialist. The details of plantation and species carried out is attached as Annexure-XXII.</p> <p>iv) We have a Biodiversity Management Plan prepared by IUCN experts. It contains the list of native species suited for plantation in all conditions including for dust removal/ dust capturing plants.</p> <p>v) Tata Steel has undertaken vetiver plantation in order to stabilize OB dumps.</p> <p>vi) It is in the scope of State Forest Department.</p>
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**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

21)	<p>Socio-Economic Related: Project Proponent shall implement the following mitigation measures: (i) Public interaction should be done on regular basis and social welfare activities should be done to meet the requirements of the local communities. Further, basic amenities and infrastructure facilities like education, medical, roads, safe drinking water, sanitation, employment, skill development, training institute etc. should be developed to alleviate the quality of life of the people of the region. (ii) Land outeers and land losers/affected people, if any, should be compensated and rehabilitated as per the national/state policy on Resettlement and Rehabilitation. (iii) The socio-economic development in the region should be focused and aligned with the guidelines/initiatives of Govt. of India/ NITI Aayog around prosperity, equality, justice, cleanliness, transparency, employment, respect to women, hope etc. This can be achieved by providing adequate and quality facilities for education, medical and developing skills in the people of the region. District administration in association with mine lease holders should plan for "Samagra Vikas" of these blocks well as other blocks of the district. While planning for different schemes in the region, the activities should be prioritized as per Pradhan Mantri Khanij Kshetra Kalyan Yojna (PMKKKY), notified by Ministry of Mines, Govt. of India, vide letter no. 16/7/2017-M.VI (Part), dated September 16, 2015. Responsibility: District Administration and Individual Mine Lease Holders.</p>	<p>i) We have a separate wing named Tata Steel Foundation who take care of the social welfare activities and for the well-being and upliftment of the people residing near the project. They interact regularly with the local communities to identify their needs and requirement and accordingly plan the yearly activities in all the listed themes. The documents related to public interaction is attached as Annexure-XXIII.</p> <p>ii) There is no case of displacement of people due to the project.</p> <p>iii) TSL is already supporting the State Government in facilitating the development of schools, conducting health camps, construction of medical facilities, provision of training and skill development programs, etc. and will continue to extend support in future too.</p>
22)	<p>Road Transport Related: Project Proponent shall implement the following mitigation measures: (i) All the mine lease holders should follow the suggested ore transport mode (SOTM), based on its EC capacity within next 5 years. (ii) The mine lease holders should ensure construction of cement road of appropriate width from and to the entry and exit gate of the mine. Further, maintenance of all the roads should be carried out as per the requirement to ensure dust free road transport. (iii) Transportation of ore should be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore/dust takes place. Further, air quality in terms of dust, PM10 should be monitored near the roads towards entry and exit gate on regular basis, and be maintained within the acceptable limits. Responsibility:</p>	<p>i) Katamati mine will abide by the SOTM system as and when the guidelines are formed by the Department of Steel and Mines, Govt of Odisha in this regard.</p> <p>ii) 400 meters of concrete road within the mine lease area is completed. Maintenance of all roads under TSL control is being done regularly to ensure dust-free road transport.</p> <p>iii) Transportation of final product by trucks, outside mine to the end-use steel plants, is being done by covering the trucks with tarpaulin so that no spillage takes place. Air quality monitoring (PM10) is being done near the exit point.</p>

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	Individual Mine Lease Holders and Dept. of Steel and Mines.	
23)	<p>1) Occupational Health Related: Project Proponent shall implement the following mitigation measures: (i) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects periodically. (ii) Occupational health surveillance program for all the employees/workers (including casual workers) should be undertaken periodically (on annual basis) to observe any changes due to exposure to dust, and corrective measures should be taken immediately, if needed. (iii) Occupational health and safety measures related awareness programs including identification of work-related health hazard, training on malaria eradication, HIV and health effects on exposure to mineral dust etc., should be carried out for all the workers on regular basis. A full-time qualified doctor should be engaged for the purpose. Periodic monitoring (on 6 monthly basis) for exposure to respirable minerals dust on the workers should be conducted, and record should be maintained including health record of all the workers. Review of impact of various health measures undertaken (at an interval of 3 years or less) should be conducted followed by follow-up of actions, wherever required. Occupational health center should be established near mine site itself. Responsibility: Individual Mine Lease Holders and District Administration (District Medical Officer).</p>	<p>i) Personal Protective Equipment for working in dusty areas are provided to all personnel. Periodic training on safety and health aspects is carried out at the training center.</p> <p>ii) Initial Medical Examination and Periodic Medical Examinations are conducted for all employees at the TSL health facility periodically and records are maintained. This is being carried in compliance to Mines Act, 1952 and Rules 1956 and amendments thereto.</p> <p>During the period January 2025 to December 2025 a total of 408 nos. of IMEs were conducted and 17 nos. of PME's were conducted.</p> <p>The occupational health surveillance shows that there is no occurrence of any kind of occupational health diseases.</p> <p>iii) Awareness programs on Occupational Health and Safety are being done regularly by our central medical team located at Jamshedpur. Similar programs are arranged at site level to include all the contract workers as well.</p> <p>A Central Hospital located at Noamundi caters to both Noamundi and Katamati mine. A full-time Occupational Health Specialist has been appointed in the hospital for periodic health check-up of employees and contractual workers.</p> <p>A program called Wellness-at-Workplace is being conducted at the mine and health of all mine workers is checked and monitored every month.</p> <p>All the health records are maintained. We will follow and implement the additional suggestions as provided.</p>
C. STANDARD CONDITIONS		
I. Statutory Compliance		
1	This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.	Noted.
2	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India and Ors before commencing the mining operations.	A payment of Rs 82,70,48,782.00/- is made as per demand notice no. 4140/ mines dated 02.09.2017. The Project Proponent is complying with all the statutory requirements and judgements of Hon. Supreme Court dated the 2nd August 2017 in writ petition (civil) no.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

		114 of 2014 in the matter of common cause vs union of India and Ors.
3)	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining and 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 and Ors.	A payment of Rs 82,70,48,782.00/- is made as per demand notice no. 4140/ mines dated 02.09.2017. The Project Proponent is complying with all the statutory requirements and judgements of Hon. Supreme Court dated the 2nd August 2017 in writ petition (civil) no. 114 of 2014 in the matter of common cause vs union of India and Ors.
4	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".	All the conditions mentioned in the MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014 are being followed. The compliance of same is attached as Annexure-XXIV .
5	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.	A copy of EC letter is sent to Deojhar panchayat and Anseikala panchayat with letter no. MD/ENV/173/110/2021 and MD/ENV/174/110/2021 dated 10.08.2021. Copy of same is attached as Annexure-XXV .
6	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.	Noted.
7	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.	Details of Environment Clearance with regard to Katamati Iron Mine were published both in English (Orissa Post) and Odiya (Prameya) in local newspapers on 11.08.2021. The copy of the newspaper advertisement was sent to the Regional Office, MoEF and CC, Bhubaneswar with letter no: MD/ENV/187-A/98/2021 dated 16.08.2021. Copy of same is attached as Annexure-XXVI .
8	The Project Proponent shall inform the MoEF and CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred, PP need to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.	Noted.

HALF-YEARLY EC COMPLIANCE REPORT FOR KATAMATI IRON MINE OF TATA STEEL LIMITED

II. Air quality monitoring and preservation	
9)	<p>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.</p>
	<p>Three continuous ambient air quality monitoring stations are installed in the core zone(two) and buffer zone(one) of mine lease area. Various parameters such as PM₁₀, PM_{2.5}, SO_x, NO_x and CO are being monitored as per guidelines. Eight manual ambient air quality monitoring stations are installed at prominent places such as pit office, viewpoint, surrounding villages etc. and monitoring is done on regular basis. The data is also been displayed using electronic display board in public domain. Average air quality data is enclosed as Annexure- XIII.</p>
10)	<p>Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.</p>
	<p>Fugitive dust emissions from all the sources are being controlled regularly on daily basis. A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large capacity namely 50 KL which can cover the entire width of the haul road has been commissioned. All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system. Chemical is used for better effectiveness of dust control by water sprinkling. Mist cannons have placed at strategic points to prevent and control of fugitive dust emission. Ambient air quality conforms to the CPCB norms.</p>
III. Water quality monitoring and preservation	
11)	<p>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.</p>
	<p>Based on observations from nearby wells and water bodies, the water table in the area is about 519 mRL. Whereas, the maximum depth at conceptual stage is considered to be 564 mRL. Hence, throughout the course of mining operations, the ground water table will remain undisturbed and the mining operation will not intersect ground water table. Currently, the mining operation is restricted above the ground water table and shall not intersect the ground water table, in case of working below prior approval from MoEF and CC and CGWA shall be obtained. For domestic use and other purposes, the mine has been granted renewal of CGWA NOC (386m³/day) issued</p>

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

		vide no. CGWA/NOC/MIN/REN/3/2025/10892, dated 22.02.2025 which is valid till 09.10.2026.
12)	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.	Ground water quality and Ground water level are being monitored periodically in and around the lease areas. All the monitoring results are being submitted to regulatory agencies. The copy of ground water quality and level is attached as Annexure-XVIII A and B respectively.
13)	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-a-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.	No perennial nallah/stream present in the mine lease area. Water quality monitoring of nallahs present outside the mine lease area is done regularly and the reports are submitted 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. SW Quality is attached as Annexure-XVII .
14)	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-	As there is no workshop present in the mine lease area, there is no generation of wastewater. All the surface runoff is allowed to pass through garland drains, check dams and then settling pit. The monitored data is displayed on an electric display board. The photograph of the display board is attached as Annexure-XXVII . The monitoring reports are uploaded on the company website as a part of this six monthly EC compliance report.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.	
15)	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.	Due to area constraint inside the mine lease area 96 nos. of ponds have been constructed in the buffer zone for ground water recharge. Further all the surface runoff generated is directed to mine pit where it is allowed to settle and augment ground water table.
16)	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.	No industrial wastewater is being generated as there is no workshop present in Katamati Iron Mine. A CETP is of 30KLD capacity with Oil and grease trap facility is installed for treating the effluent generated from common workshop at Noamundi.
17)	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF and CC and State Pollution Control Board/Committee.	There is zero waste-water discharge by the mine and it will be maintained in the future as well. Water audit is carried out by an accredited consultant from CGWA and the improvements suggested are being carried out to reduce consumption of water.
IV. Noise and vibration monitoring and prevention		
18)	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.	Monitoring of peak particle velocity is done during every blast and the reports are being maintained. Copy of vibration monitoring is attached as Annexure-XV .
19)	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.	The illumination and sound has been done in such a way that the villagers are not disturbed. The copy of Noise Monitoring report is attached as Annexure-XVI .
20)	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it	Adequate measures are taken for control of work noise levels such as all HEMMs have acoustic cabins with air conditioners and the exhaust manifold have silencers. Noisy operations have been identified and persons engaged in such operations are provided with ear plugs/muffs.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	has been found that workers/ personals/ laborers are working without personal protective equipment.											
V. Mining plan												
21)	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden and dump management, O.B and dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).	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 and dump management, O.B and 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 etc. are as per the approved Mine Plan. The details of production for the last 3 years are as follows: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Year</th> <th>ROM Production</th> </tr> </thead> <tbody> <tr> <td>2022-23</td> <td>7581611 MT</td> </tr> <tr> <td>2023-24</td> <td>11682921 MT</td> </tr> <tr> <td>2024-25</td> <td>11270000 MT</td> </tr> <tr> <td>2025-26</td> <td>13210000MT</td> </tr> </tbody> </table>	Year	ROM Production	2022-23	7581611 MT	2023-24	11682921 MT	2024-25	11270000 MT	2025-26	13210000MT
Year	ROM Production											
2022-23	7581611 MT											
2023-24	11682921 MT											
2024-25	11270000 MT											
2025-26	13210000MT											
22)	The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-a-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.	Noted. Land-use of the mine lease area are governed as per the approved mining plan. Excavation, backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area are governed as per approved mining plan. Report on plantation activities is being submitted regularly to the state pollution control Board along with monthly reports.										
VI. Land Reclamation												
23)	The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.	Over burden is stacked at the earmarked places only. The slopes of the OB dumps are terraced, and the overall slope angle is maintained. Generation of topsoil is very minimal because no fresh area is being broken for mining and the top soil generated, is being kept at the earmarked site(s) only inside the mining lease area and is being used for plantation and other vegetation and grassing activities. The inactive dump slopes are covered with geo-textile coir-mat and vegetated with native species, grass seeds and vetiver grass for better slope stabilization.										
24)	The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it	Slope of the dumps are being stabilized by coir matting and vetiver grassing etc.,										

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	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 I clay liners/ Bentonite etc. shall be undertaken for stabilization of the dump.	
25)	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.	There is no discharge of any industrial effluent outside the mine lease. All the garland drains, settling pits and check dams of appropriate size, gradient and length been constructed both around the mine pit and over burden dump(s) to prevent run off of water and flow of sediments directly into water bodies. Photographs of toe wall, garland drain and settling pits are attached as Annexure-XX .
26)	Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.	All the garland drains, settling pits and check dams of appropriate size, gradient and length been constructed as per progressive mine closure plan both around the mine pit and over burden dump(s) to prevent run off of water and flow of sediments directly into water bodies.
VII. Transportation		
27)	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening	Being Complied. Out of 13.5 MTPA total production, approximately 9.5 MTPA of ROM shall be processed in tandem with Noamundi ore in the processing plant located at Noamundi and conveyed through closed conveyor belts to the private railway siding at Noamundi. 11.5 MTPA of final product from Katamati is dispatched from the private railway siding and other public railway sidings.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	<p>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].</p>	<p>Approximately 4 MTPA ROM shall be processed at the processing plant located at Katamati. The finished product shall be continued to be sent to the steel plants through railway siding either through Noamundi or through public siding at Deojhar or by road directly to the steel plants.</p> <p>Currently around 2 MTPA processed ore (maximum) is dispatched by trucks due to a shortage of racks and wagon availability from Railway.</p>
28)	<p>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.</p>	<p>A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large capacity namely 50 KL which can cover the entire the entire width of the haul road has been commissioned.</p> <p>All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system.</p> <p>Mist cannons have placed at strategic points to prevent and control of fugitive dust emission.</p> <p>Ambient air quality conforms to the CPCB norms.</p>
VIII. Green Belt		
29)	<p>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.</p>	<p>The green belt has been developed with native species on all along the safety zone and other area.</p>
30)	<p>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</p>	<p>Saplings planted apart from local grass plantation on dumps with various species. The species include <i>Calotropis gigantean</i>, <i>ficus</i> species, <i>Pedilanthus</i>, <i>Cynodon dactylon</i>, <i>Saccharum spontaneum</i>, <i>Bougainvilleas</i>, <i>Yellow durenta</i>, etc. are planted. <i>Saccharum spontaneum</i> planted on slime pond, shown</p>

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	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.	encouraging results, which control the erosion bind the material and adequately covers the ground vegetation.
31)	The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.	No grazing land has been acquired.
IX. Public hearing and human health issues		
32)	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche 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.	Township has been developed at Noamundi (adjacent to Katamati mine) for workers with all the adequate facilities such as hospital, schools, STP etc.
X. Corporate Environment Responsibility (CER)		
33)	The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF and CC Office Memorandum No.22-65/2017-IA.11I dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.	Time bound action plan for undertaking the activities during Public Consultation has already been followed and submitted.
XI. Miscellaneous		

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

34)	The Project Proponent shall prepare digital map (land use and 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 and CC.	The digital processing of entire lease area is being carried out regularly. The current land use pattern is made by M/s Digital Cartography and Services Pvt. Ltd. the authorized agency by ORSAC, Bhubaneswar. And the LULC report is attached as Annexure-X .
35)	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work	Not applicable. Katamati is an operational Iron mine of Tata Steel Ltd from last several decades. Thus financial closure and its approval is not applicable.
36)	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC and its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.	Six monthly compliance reports are being submitted regularly on the status of implementation of the stipulated environmental safeguards to the MoEF and CC, its Regional Office Bhubaneswar, Central Pollution Control Board and State Pollution Control Board. The submission confirmation of last submitted EC compliance report is attached as Annexure-XXVIII .
37)	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.	A separate environmental management cell is in place with people having relevant qualification on environmental science. Organization has adequate environmental reporting system for adequate decision making. The formation details is attach as Annexure-XXIX .
38)	The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data/ information/ monitoring reports.	Full cooperation shall be extended to the officers in furnishing the requisite data/ information/ monitoring reports.
39)	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause Vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.	Shall be complied after ceasing of mining operations. Although concurrent grassing of the area is undertaken which has been already explained earlier.
40)	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Noted.
41)	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in	Noted.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	withdrawal of this clearance and' attract action under the provisions of Environment (Protection) Act, 1986.	
AMENDMENT OF ENVIRONMENTAL CLEARANCE NO. J-11015/63/2008-IA-II(M) DATED 18.01.2019		
	Specific Condition	
i	This Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors	A payment of Rs 82,70,48,782.00/- is made as per demand notice no. 4140/ mines dated 02.09.2017. The Project Proponent is complying with all the statutory requirements and judgements of Hon. Supreme Court dated the 2nd August 2017 in writ petition (civil) no. 114 of 2014 in the matter of common cause vs union of India and Ors.
ii	Department of Mining and Geology, State Government shall ensure that mining operation shall not commence till the entire compensation levied, for illegal mining paid by the Project Proponent through their respective Department of Mining and Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	A payment of Rs 82,70,48,782.00/- is made as per demand notice no. 4140/ mines dated 02.09.2017. The Project Proponent is complying with all the statutory requirements and judgements of Hon. Supreme Court dated the 2nd August 2017 in writ petition (civil) no. 114 of 2014 in the matter of common cause vs union of India and Ors.
iii	Monitoring of Ambient Air Quality to be carried out based on the 2009 Notification, as amended from time to time by the Central Pollution Control Board.	Ambient Air Quality monitoring is being carried out at 8 locations covering both core zone and buffer zone areas. And the Ambient air monitoring report for the period October 2025 to March 2026 is attached as Annexure-XIII .
iv	The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicles with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre; Washing of all transport vehicle should be done inside the mining lease.	The pollution due to transportation is being controlled by sprinkling water on the transportation road outside the mining lease area. Vacuum sweeping machine is also deployed on the mineral haul roads both within and outside the mining lease area. And all the transport trucks are covered with tarpaulin sheets and the same is being ensured at the mines exit gate. Vehicles with valid PUC certificates are allowed into the mines for mineral transportation. The mineral transported trucks are not overloaded. All the tyre mounted HEMMs plying within the mines are having valid PUC certificate from authorized pollution testing centre. Washing of HEMM is being done at Vehicle washing ramp and ETP installed at adjacent Noamundi Iron Mine and the treated water is being recycled for vehicle washing purpose.
v	The activities and budget earmarked for Corporate Environment Responsibility (CER) shall be as per Ministry's O.M No. 22-65/2017-IA. II (M) dated 01.05.2018 and the action plan on the activities proposed under CER shall be submitted to the	All the activities committed during PH compliance has been implemented. The details of PH commitments and compliance status is attached as Annexure-I .

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	Regional Office of the Ministry and State Pollution Control Board.	
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ENVIRONMENTAL CLEARANCE NO. J-11015/63/2008-IA-II(M) DATED 26.11.2010		
Sl	Specific Conditions	
i.	The project proponent shall obtain Consent to Establish and Consent to Operate from the State Pollution Control Board, Orissa and effectively implement all the conditions stipulated therein.	Consent to Establish has been obtained vide letter no. 12850/IND-II-NOC-5109, dated: 04.08.2010. And subsequently Consent to Operate for 8.00 MTPA (ROM) has been obtained vide letter no. 1202/IND-I-CON-185, dated: 24.01.2011. The front page of the CTE and CTO are attached as Annexure-XXX and XXXI respectively.
ii.	Environmental clearance is subject to grant of forestry clearance. Necessary forestry clearance under the Forest (Conservation) Act, 1980 for an area of 199.172ha forestland Involved in the project shall be obtained before starting mining operation in that area. No mining shall be undertaken In the forest area without obtaining requisite prior forestry clearance.	The forest diversion proposal was submitted on 17.04.2007 over an area of 196.9719 ha (165.7928 ha fresh diversion and 31.1791 ha forest land broken prior to 1980) leaving a safety zone of 2.2001 ha. Then mining operation was restricted within the non-forest land. And subsequently the Forest clearance has been granted for 360.01 ha. Vide letter no. 8-1/1018-FC dated: 09.06.2021.
iii.	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.	Noted. There is no National Park, Sanctuaries, elephant corridor and tiger reserves within 10 KM radius of lease area.
iv.	Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.	No specific clearance under the Wildlife (Protection) Act, 1972 is required for the project.
v.	The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.	The water table in the area is about 519 mRL. Whereas the maximum depth at conceptual stage is 564 mRL. Hence, throughout the course of mining operations, the ground water table will remain undisturbed, and the mining operation will not intersect ground water table.
vi.	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Adequate measures shall be taken for conservation and protection of the first order and the second order streams, If any, emanating from the mine lease area during the course of mining operation.	No natural watercourse or water resources are obstructed due to mining operation. Further, there are no first order or second order streams emanating from mining lease area.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

vii.	The top soil, If any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.	No topsoil generated during the reporting period 2025-26. Previously generated topsoil has been utilized for the purpose of green belt development, dump stabilization and horticulture activities.
viii.	The subgrade material, if any shall be stacked at the earmarked sites.	Sub-grade material is being stacked at earmarked area within the mining lease area as per the approved mining plan.
ix.	The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and Its phase-wise stabilization shall be carried out. Partial backfilling proposed after cessation of mining. The maximum height of the OB dump(s) shall not exceed 30m having three terraces of 10m each and the overall slope of the dumps shall not exceed 27°. It shall be ensured that the OB dump(s) shall have a factor of safety not less than 1.3. The OB dump(s) should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment and Forests and its Regional Office located at Bhubaneswar on six monthly basis.	Over burden material is being stacked at earmarked area within the mining lease area as per the approved mining plan. Backfilling activities are also in progress. The dump height is being maintained as per the slope stability study report submitted by CIMFR, Dump stabilization by laying of coir-mat, vegetation of native species, sal plantation, vetiver plantation is being carryout. The compliance status is being regularly sent to the Regional office, MoEF and CC, Bhubaneswar and SPCB Odisha on six monthly basis.
x.	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, sub-grade, over burden and mineral dump(s) to prevent run off of water and flow of sediments directly into the Mahadev Nallah, Betlata Nallah, Baitarni River and other water bodles. The water so collected should be utilized for watering the mine area, Toads, green belt development etc. The drains shall be regularly desilted particularly after the monsoon and maintained properly. Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed around the mine pit, over burden dumps and sub-grade and mineral dump(s) to prevent run off of water and flow of sediments directly into the Mahadev Nallah, Betlata Nallah, Baitarni River and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall	Garland drains with settling pits have been made all along the OB and sub-grade dumps. 4 nos. of settling pits have been constructed at the end of garland rains to take care of run-off water and sediments. The majority of the run-off generated from mines is diverted to the mining pit. There is no effluent discharge outside the mining lease area.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	(based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.	
xi.	Dimension of the retaining wall at the toe of the over burden dump(s) and the OB benches within the mine to check run-off and siltation shall be based on the rain fall data.	Retaining wall and garland drains have been constructed around the OB dump to check mines run-off.
xii.	Trace Metals such as Ni, Co, As, and Hg should be analysed in dust fall and soil samples for at least one year during summer, monsoon and winter monsoon. If concentrations of these metals are found below the standards then with prior approval of MOEF this specific monitoring could be discontinued.	We are monitoring trace metals in dust fall and soil samples.
xiii.	Plantation shall be raised in an area of 370,1555ha including a 7.5m wide green belt In the safety zone around the mining lease, over burden dump(s), backfilled and reclaimed area, mine benches, around water body, roads etc. In consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per hectare. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	Plantation over 370.1555 ha shall be raised at the end of the mines life. Plantation over 7.5 m wide green belt in the safety zone area all around the mines boundary is complete. We have maintained tree density of 2500 plant per hectare.
xiv.	The void left unfilled in an area of 11.2ha shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out all along the excavated area.	Shall be complied at the end of the mines life.
xv.	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large capacity namely 50 KL which can cover the entire the entire width of the haul road has been commissioned. All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system. Mist cannons have placed at strategic points to prevent and control of fugitive dust emission. Ambient air quality conforms to the CPCB norms.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

xvi.	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained.	Water quality monitoring and flow rate monitoring of nallahs present outside the mine lease area is being done regularly and the records are being maintained. The surface water flow rate is attached as XXXII .
xvii.	The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	Due to area constraint inside the mine lease area ponds have been constructed in the buffer zone for ground water recharge. Further all the surface runoff generated is directed to mine pit where it is allowed to settle and augment ground water table.
xviii.	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board, If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.	Regular monitoring of ground water level on monthly basis and its quality on quarterly basis is being carried out within the mine lease area and surrounding areas. A network of dug wells and borewells with piezometers already exists for this purpose. The report of the same is being shared to the Ministry of Environment and Forests and its Regional Office Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board on six monthly basis. The ground water quality and level report is attached as Annexure-XVIII A and B respectively.
xix.	Appropriate mitigative measures should be taken to prevent pollution of the Baitarni River in consultation with the State Pollution Control Board.	Being complied.
xx.	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water required for the project. The ground water shall not be used for mining operations. Prior approval of Central Ground Water Authority shall be obtained for using ground water.	We have obtained NOC from CGWA, New Delhi for drawl of ground water vide NOC no. CGWA/NOC/MIN/REN/3/2025/10892 dated: 22.02.2025. Additionally, surface water is being sourced from Noamundi Iron Mine for which surface water permission from Water resource department has been taken.
xxi.	Suitable rainwater harvesting measures on long term basis shall be planned and Implemented in consultation with the Regional Director, Central Ground Water Board.	Due to area constraint inside the mine lease area ponds have been constructed in the buffer zone for ground water recharge. Further all the surface runoff generated is directed to mine pit where it is allowed to settle and augment ground water table.
xxii.	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The	Vehicular emission checks of all the wheel mounted HEMMs are done at regular intervals. Maintenance of mining equipment is done on regular basis. It is

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	mandatory for any vehicle entering the mine premises to have a valid fitness certificate. The mineral transported trucks are not overloaded.
xxiii.	Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be Implemented.	Blasting operation are being carried out during day time only. Blasting is done using the controlled blasting technique. In this regard, one study has been made by CIMFR (Central Mining and Fuel Research Institute), Dhanbad and recommendations therein are being followed. Initiation system is through either NONEL/electronic detonation system so as to ensure minimal ground vibration
xxiv.	Drills shall either be operated with the dust extractors or equipped with water injection system.	All drilling machines are equipped with in-built dust extraction/ suppression system which has an interlock which prohibits drilling without water.
xxv.	Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas Including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large capacity namely 50 KL which can cover the entire the entire width of the haul road has been commissioned. All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system. Mist cannons have placed at strategic points to prevent and control of fugitive dust emission.
xxvi.	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.	A 30 KLD CETP along with Oil and Grease trap is installed to treat all the effluent generated from washing of HEMM's in workshop at Noamundi. This caters to Katamati mine as well.
xxvii.	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	Initial Medical Examination and Periodic Medical Examinations are conducted for all employees at the TSL health facility periodically and records are maintained. This is being carried in compliance to Mines Act, 1952 and Rules 1956 and amendments thereto. During the period January to December 2025 a total of 408 nos. of IMEs were conducted and 17 nos. of PMEs were conducted.
xxviii.	Effective safeguard measure shall be taken to ensure that the RSPM levels in the area are well below the prescribed standards.	A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large capacity namely 50 KL which can cover the entire the entire width of the haul road has been commissioned. All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system. Mist cannons have placed at strategic points to prevent and control of fugitive dust emission. Ambient air quality conforms to the CPCB norms.
xxix.	The height of stack shall be as per the prescribed standards / guidelines.	No stacks present within the mine lease area.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

xxx.	Trace metals such as Fe, Cr +6, Cu, Se, As, Cd, Hg, Pb, Zn and Mn shall be periodically monitored at specific locations in both surface water downstream and in ground water at lower elevations from mine area, in consultation with the OSPCB and State Ground Water Board. Suitable treatment measures shall be undertaken in case levels are found to be higher than permissible limits.	Trace metals are monitored for ground water. The reports are shared to OSPCB on quarterly basis. The monitoring report of Ground water qualities is attached as Annexure- XVIII A .
xxxii.	Occupational health programme encompassing identification of hazards, ranking of the risks, plan to handle such risk should be prepared and implemented effectively.	Awareness programs on Occupational Health and Safety are being done regularly by our central medical team located at Jamshedpur. Similar programs are arranged at site level to include all the contract workers as well. A Central Hospital located at Noamundi caters to both Noamundi and Katamati mine. A full-time Occupational Health Specialist has been appointed in the hospital for periodic health check-up of employees and contractual workers. A program called Wellness-at-Workplace is being conducted at the mine and health of all mine workers is checked and monitored every month. All the health records are maintained. We will follow and implement the additional suggestions as provided.
xxxiii.	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora and endangered fauna namely elephant, sloth bear etc. found in the study area. Action plan for conservation of flora and fauna prepared shall be implemented in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan prepared specific to this project site shall be effectively Implemented. Necessary allocation of funds for Implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Regional Office of the Ministry of Environment and Forests, Bhubaneswar.	The new conservation plan has been approved vide letter no. 7924/CWLW-FDWC-FD-0021-2021 dated 14 th July 2023.
xxxiiii.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Not applicable. As no separate colony for Katamati iron mine.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

xxxiv.	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and Its regional office	The digital processing of entire lease area is being carried out regularly. The current land use pattern is made by M/s Digital Cartography and Services Pvt. Ltd. the authorized agency by ORSAC, Bhubaneswar. And the LULC report is attached as Annexure-X .
xxxv.	The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM10) and NOx In the ambient air within the Impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)). The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-JA.II(M) dated 27.05.2009 Issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.	All the parameters are being monitored and the monitoring data is being uploaded on the company's website as part of six monthly EC compliance. All the monitoring parameters are digitally displayed on the digital display board installed at the mines main gate.
xxxvi.	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment and Forests 5 years in advance of final mine closure for approval.	Progressive mine closure plan has been approved by IBM. As per the MCDR, 2017 the Final Mine closure plan shall be submitted to competent authority for approval two years prior to the proposed closure of the mine.
B.	General Conditions	
i.	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.	We are operating the mines as per the mining plan approved by IBM.
ii.	No change in the calendar plan including excavation, quantum of mineral iron ore and waste should be made.	No change in calendar plan as approved by IBM.
iii.	At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM10) and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	Eight manual ambient air quality monitoring stations are installed at prominent places such as pit office, viewpoint and surrounding villages etc. and monitoring is done on regular basis as per the NEERI recommendation.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

iv.	Data on ambient air quality [(RSPM(Particulate matter with size less than 10micron i.e., PM10) and NOx) should be regularly submitted to the Ministry including its Regional office located at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.	RSPM(Particulate matter with size less than 10micron i.e., PM10) and NOx monitoring is being carryout on daily basis at 4 locations within the mines lease area and the report are submitted to the Regional office located at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.
v.	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large capacity namely 50 KL which can cover the entire the entire width of the haul road has been commissioned. All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system. Mist cannons have placed at strategic points to prevent and control of fugitive dust emission.
vi.	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.	Monitoring of Noise level are being done regularly at the identified major sources of noise generation within core zone. People working at high noise areas are provided with ear plugs and ear muffs.
vii.	Industrial waste water (workshop and waste water from the mine). should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	A 30 KLD CETP along with Oil and Grease trap is installed to treat all the effluent generated from washing of HEMMs in workshop at Noamundi. This caters to Katamati mine as well.
viii.	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Personal Protective Equipment for working in dusty areas are provided to all personnel. Periodic training on safety and health aspects is carried out at the training centre.
ix.	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization,	A separate environmental management cell is in place with people having relevant qualification on environmental science. Organization has adequate environmental reporting system for adequate decision making.
x.	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bhubaneswar.	Funds allocated for environment management are spent only for environment related purposes and not diverted for any other use. The detailed Environment expenditure made during the period April 2025 to March 2026 is attached as Annexure-XXXIII .

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

xi.	The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	We shall abide by the said condition.
xii.	The Regional Office of this Ministry located at Bhubaneswar 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.	Full cooperation shall be extended to the officers in furnishing the requisite data/ information/ monitoring reports.
xiii.	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions Including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Bhubaneswar, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Bhubneswar, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.	Six monthly compliance report both hard copy and soft copy is being submitted on regular basis. And the same is being uploaded on TSL website.
xiv.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, If any, from whom suggestions/ representations, If any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	A copy of Environment Clearance has been sent to the nearby Panchayats. The copy of letters is attached as Annexure-XXV . Further, copy of EC letter has also been uploaded on the Tata Steel website www.tatasteel.com.
xv.	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.	Noted.
xvi.	The environmental statement for each financial year ending 31st March in Form-V as Is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of	Environment statement is being submitted on annual basis before 30 th September of every year and the same has been hosted on Company s website www.tatasteel.com.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	compliance of environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment and Forests, Bhubaneswar by e-mail.	
xvii.	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.	Details of Environment Clearance with regard to Katamati Iron Mine were published both in English (New Indian Express) and Odiya (Pragatibadi) in local newspapers on 02.12.2010. The copy of the same is attached as Annexure-XXXIV .

ENVIRONMENTAL CLEARANCE NO. J-11015/120/2003-IA-II(M) DATED 06.05.2005		
Sl.	Specific Conditions	
i	Mining shall not be undertaken in forestland without the necessary approvals/ forestry clearance.	At the time prior to grant of Forest clearance the mining activities were restricted within the non-forest area. Subsequently the Forest clearance has been granted for 360.01 ha. Vide letter no. 8-1/1018-FC dated: 09.06.2021.
ii	OB should be stacked at the two earmarked dump site(s) only, stabilised and reclaimed. The maximum overall slope of dump even if single stage shall not exceed 28°.	OB is being stacked at one dump. The dump is stabilized with coir-mat, plantation, vetiver etc.
iv	Mineral rejects shall be stacked separately at earmarked site/dump-only. Garland drains (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Storm water return system should be provided. Storm water should not be allowed to go to the effluent treatment plant during high rainfall/super cyclone period. A separate storm water sump for this purpose should be created.	Over burden material is being stacked at earmarked area within the mining lease area as per the approved mining plan. Dump stabilization by laying of coir-mat, vegetation of native species, sal plantation, vetiver plantation is being carryout. Retaining wall and garland drains have been constructed around the OB dump to check mines run-off. Storm water is not allowed to mix with the effluent generated from vehicle washing. Majority of the run-off generated within the mines is being diverted into the mines pit.
v	Dimension of retaining wall at the toe of OB dumps and benches within the mine to check run-off and siltation should be based on the rainfall data.	Retaining wall and garland drains have been constructed around the OB dump to check mines run-off.
vi	Trace Metals such as Ni, Co, As, and Hg should be analysed in dust fall and soil samples for at	We are monitoring trace metals in dust fall and soil samples.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	least one year during summer, monsoon and winter seasons. If concentrations of these metals are found below the standards then with prior approval of MOEF this specific monitoring could be discontinued.	
vii	Road network shall be developed within the lease area before expansion for transport of the mineral from the quarry area.	Road network has been developed within the mining lease area for transport of mineral from quarry area.
viii	Mineral and OB transportation shall be in trucks/dumpers covered with tarpaulins. Vehicular emissions should be kept under control and regularly monitored. Suitable measures should be taken to check fugitive emissions from haulage roads, transfer points, etc.	It is ensured that all the vehicles exiting the mine gate are checked for use of tarpaulin cover and are not overloaded. Vehicular emission checks of all the wheel mounted HEMMs are done at regular intervals. Maintenance of mining equipment is done on regular basis. A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large capacity namely 50 KL which can cover the entire width of the haul road has been commissioned. All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system.
ix	A green belt of adequate width should be raised by planting the native species around ML area. Plantation should also be carried out along roads, OB dump sites etc. in consultation with the local DFO / Agriculture Department. The density of the trees should be around 2500 plants per ha.	Adequate number of saplings have been planted in the safety zone. A total of 10147 nos. of saplings were planted during the period October 2025 to March 2026. The tree density is maintained around 2500 plants per ha.
x	Groundwater shall not be used for mine operations. Prior approval of CGWA shall be obtained for using groundwater.	NOC has been accorded by CGWA vide NOC No. CGWA/NOC/MIN/REN/3/2025/10892 dated: 22.02.2025 which is valid till 09.10.2026
xi	Mining will not intersect groundwater. Prior permission of the MOEF and CGWA shall be taken to mine below water table.	The water table in the area is about 519 mRL. Whereas the maximum depth at conceptual stage is 564 mRL. Hence, throughout the course of mining operations, the ground water table will remain undisturbed, and the mining operation will not intersect ground water table.
xii	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers. The monitoring should be done for quantity four times a year in pre-monsoon (April /May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected should be submitted to the Ministry of Environment and Forests and the Central Ground Water Authority quarterly.	Ground water quality and Ground water level are being monitored periodically in and around the lease areas. All the monitoring results are being submitted to regulatory agencies.
xiii	Trace metals such as Fe, Cr +6, Cu, Se, As, Cd, Hg, Pb, Zn and Mn shall be periodically monitored at specific locations in both surface water downstream and in ground water at lower elevations from mine area, in consultation with	Trace metals are monitored for both ground water and surface water. The reports are shared to OSPCB on quarterly basis.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	the OSPCB and State Ground Water Board. Suitable treatment measures shall be undertaken in case levels are found to be higher than permissible limits	
xiv	"Consent to Operate" should be obtained from SPCB before expanding mining activities.	Consent to Operate for 2.0 MTPA (ROM) was obtained vide letter no. 6845/SPCB/BBSR-I-IND(CON)-185, dated: 30.03.2006. Copy of the same is attached as Annexure-XXXV .
xv	Specific conservation measures shall be taken up for conservation of endangered fauna, if found within the lease area, in consultation with the State Government.	The new conservation plan has been approved vide letter no. 7924/CWLW-FDWC-FD-0021-2021 dated 14 th July 2023.
xvi	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment and Forests 5 years in advance of final mine closure for approval.	Progressive mine closure plan has been approved by IBM is in place. As per the MCDR, 2017 the Final Mine closure plan shall be submitted to competent authority for approval two years prior to the proposed closure of the mine.
B.	General Conditions	
i	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.	We are operating the mines as per the mining plan approved by IBM.
ii	No change in the calendar plan including excavation, quantum of iron ore and waste should be made.	No change in calendar plan as approved by IBM.
iii	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO ₂ , NO _x and CO monitoring. Location of the stations should be decided based on the meteorological data, topographical features, and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Data on ambient air quality (RPM, SPM, SO ₂ , NO _x and CO) should be regularly submitted to the Ministry including its Regional office at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.	Eight manual ambient air quality monitoring stations are installed at prominent places such as pit office, viewpoint and surrounding villages etc. and monitoring is done on regular basis as per the NEERI recommendation.
iv	Drills should be wet operated or with dust extractors and controlled blasting should be practiced.	All drilling machines are equipped with in-built dust extraction/ suppression system which has an interlock which prohibits drilling without water. Blasting is done using the controlled blasting technique. In this regard, one study has been made by CIMFR (Central Mining and Fuel Research Institute), Dhanbad and recommendations therein are being followed. Initiation system is through either NONEL/electronic detonation system so as to ensure minimal ground vibration.
v	Fugitive dust emissions from all the sources should be controlled regularly monitored and data recorded properly. Water spraying	A network of fixed water sprinklers has been laid on permanent haul roads. Mobile water tankers of large

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

	arrangements on haul roads, wagon loading, dumpers/ trucks, loading and unloading points should be provided and properly maintained.	capacity namely 50 KL which can cover the entire the entire width of the haul road has been commissioned. All feed hoppers where ore is unloaded and all transfer chutes have been provided with dry-fog dust suppression system.
vi	Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operations of HEMM, etc should be provided with ear plugs / muffs.	Adequate measures are taken for control of work noise levels such as all HEMMs have acoustic cabins with air conditioners and the exhaust manifold have silencers. Noisy operations have been identified and persons engaged in such operations are provided with ear plugs/muffs.
vii	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	A 30 KLD CETP along with Oil and Grease trap is installed to treat all the effluent generated from washing of HEMMs in workshop at Noamundi. This caters to Katamati mine as well.
viii	Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.	An environment lab has been setup at Noamundi.
ix	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Personal Protective Equipment for working in dusty areas are provided to all personnel. Periodic training on safety and health aspects is carried out at the training centre.
x	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	A separate environmental management cell is in place with people having relevant qualification on environmental science. Organization has adequate environmental reporting system for adequate decision making.
xi	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bhubaneshwar.	Funds allocated for environment management are spent only for environment related purposes and not diverted for any other use. The detailed Environment Expenditure for the period April 2025 to March 2026 is attached as Annexure-XXXIII .
xii	The Regional Office of this Ministry located at Bhubaneshwar 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.	Full cooperation shall be extended to the officers in furnishing the requisite data/ information/ monitoring reports.

**HALF-YEARLY EC COMPLIANCE REPORT FOR
KATAMATI IRON MINE OF TATA STEEL LIMITED**

xiii	A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom and suggestion / representation has been received while processing the proposal.	A copy of Environment Clearance has been sent to the nearby Panchayats. The copy of letters is attached as Annexure-XXV .
xiv	The State Pollution Control Board should display a copy of the clearance letter at the regional office, District Industry Centre and Collector's office/ Tehsildar's Office for 30 days.	Noted.
xv	The project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at Web Site of the Ministry of Environment and Forests at http://envfor.nic.in . and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneshwar.	Details of Environment Clearance with regard to Katamati Iron Mine were published both in English (Sambad) and Odiya (Pragatibadi) in local newspapers on 12.05.2005. The copy of the same is attached as Annexure-XXXVI .

Public Hearing Commitments



SL.No	Activities	Particulars/ PH Requirements	Quantity	Status	Expenditure Made (in Lakhs)
1	Education	Construction of additional classrooms & boundary wall at Belaipada High School	1 no	Work completed	74.58
2		Provision of computer equipment at Saraswati Sishu Mandir School	5 nos.	Work completed	2.42
3	Livelihood	Construction of Goatery sheds	100 nos.	Work completed	28.16
4		Support for Entrepreneurship development		Work completed	27.43
5	Swachh Bharat	Providing toilets to individual households	200 nos.	Work completed	55.16
6		Providing toilet facility with water arrangements in two schools	2 units	Work completed	53.23
7	Agriculture	Construction of vermicompost pit	100 nos.	Work completed.	18.80
8	Infrastructure Development	Construction of Kalyan Mandap	1 no	Work completed.	151.0
9		Revamping of Temples (Murga Mahadev & Budha Temple)		Work completed	72.09
10		Construction of boundary wall, stage, platform, shed at playground.		Work completed	30.83
11	Health care	Setting up of Dispensaries at Deojhar GP & Anseikela GP	2 nos.	Work completed	227.0
12		Provision of Ambulance at Deojhar GP & Ansaikela GP	2 nos.	Work completed	49.0

Public Hearing Commitment (Education)



Photograph of Constructed Additional Classroom & boundary wall

Public Hearing Commitment(Livelihood)



Photograph of Goatery Shed at Surrounding Village

Public Hearing Commitment(Livelihood)



Photographs of Mushroom cultivation at Surrounding Village

Public Hearing Commitment(Livelihood)



Photographs of Entrepreneurship development/Skill development



Photograph of toilet facility to individual household

Public Hearing Commitment(Swachh Bharat)



Photographs of toilet constructed in surrounding schools

Public Hearing Commitment(Agriculture)



Photographs of constructed Vermicompost Pit

Public Hearing Commitment (Infrastructure Development)



Photograph of Revamping of Murgamahadev Temple



Photograph of Stage , platform shed at playground

Public Hearing Commitment (Health Care)



Photograph of dispensary at Deojhar GP



Photograph of Ambulance at Deojhar GP

ANNEXURE-II



Photographs of plantation carriedout at
Katamati Mines



TC-5097

AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION

P. O. Ambawadi Vistar, Ahmedabad-380 015. India.
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 Sample Collection : 7990590718, Marketing : 9313541439
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**TEST REPORT**

Format No.: ATIRA/TT/24/001

ULR NUMBER TC 5097 25 2 00000530F	
Test Report No: A/T/1913	2024-25
Date: 07.02.2025	
Mill/Company/Customer:	VEL EXPORTS
Address & Contact Details:	No. 2-833/2, Royal Avenue, Marudu Pandiyar Street, Thasildar Nagar, Madurai-625020, Tamilnadu Email : info@velexports.com
Sample forwarding Letter No. & Date:	Nil dated 23.01.2025
Date of receipt of Sample:	24.01.2025
Lab Sample Code No. :	TTCT-4074

Number of Samples : 01
Date of Performance of test(s): 24.01.2025 to 06.02.2025
Sample Description : Coir Woven Geotextiles
Discipline / Group : Mechanical Testing / Textile

Sr. No.	Test Parameter	Unit	Test Method	Test Results
1.	Break Load (Dry Test)	kN/m	IS 13162-5	20.19 15.25
	Machine Direction			
	Cross Direction			
2.	Break Load (Wet Test)	kN/m	IS 13162-5 (Clause no 7.2) Immersion 24hrs	15.45 11.04
	Machine Direction			
	Cross Direction			
3.	Peak Load (Dry Test)	kN/m	IS 13162-5	23.06 16.94
	Machine Direction			
	Cross Direction			
4.	Peak Load (Wet Test)	kN/m	IS 13162-5 (Clause no 7.2) Immersion 24hrs	17.43 12.43
	Machine Direction			
	Cross Direction			
	Elongation at break	%		43.7 39.5
	Machine Direction			
	Cross Direction			
	Elongation at break	%		47.3 44.6
	Machine Direction			
	Cross Direction			
	Elongation at break	%		51.0 49.1
	Machine Direction			
	Cross Direction			
	Elongation at break	%		47.3 44.6
	Machine Direction			
	Cross Direction			


 AUTHORISED SIGNATORY
 Textile Testing Laboratory
 ATIRA, Ahmedabad



AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION

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TEST REPORT

Format No.: ATIRA/TT/24/001

ULR NUMBER TC 5097 25 2 00000530F	
Test Report No: A/T/1913	2024-25
Date: 07.02.2025	
Mill/Company/Customer:	VEL EXPORTS
Address & Contact Details:	No. 2-833/2, Royal Avenue, Marudu Pandiyar Street, Thasildar Nagar, Madurai-625020, Tamilnadu Email : info@velexports.com
Sample forwarding Letter No. & Date:	Nil dated 23.01.2025
Date of receipt of Sample:	24.01.2025
Lab Sample Code No. :	TTCT-4074

Number of Samples : 01
Date of Performance of test(s): 24.01.2025 to 06.02.2025
Sample Description : Coir Woven Geotextiles
Discipline / Group : Mechanical Testing / Textile

Sr. No.	Test Parameter	Unit	Test Method	Test Results
1.	Determination of Mass Per Unit area	g/m ²	IS 15868	872.50
2.	Measurement of Nominal Thickness of Geosynthetics	mm	IS 15868	8.12
3.	Dimension Length Width	m cm	IS 12503	2.05 200.0
4.	Mesh Size Machine Direction Cross Direction	cm	IS 15868	1.7 2.0

Discipline / Group : Chemical Testing / Textile

Sr. No.	Test Parameter	Unit	Test Method	Test Results
1.	Blend Analysis	%	IS 3416 Part-I (On dry Basis)	100% Natural Cellulose Fiber


AUTHORISED SIGNATORY
Textile Testing Laboratory
ATIRA, Ahmedabad

Financial Implications and Monitoring Out side Project Area			
Sl. No.	Description of interventions		Status
1	Nicholson Forest Training Institute, Champua is one of the few Training Institute which imparts training to the frontline forest staffs of the State. Upgradation of its physical infrastructures is critical for strengthening human capacity & capability to prevent and mitigate Human-Wildlife Conflict as well as protection of Wildlife. This training institute not only caters to Keonjhar but to whole Odisha. Upgradation of the institute will help in more focused training that will help in creation of skilled trainees for conservation of wildlife of State in general and Keonjhar in particular.		
	i.	Construction of Auditorium	Tree felling has been completed and construction work is under progress.
	ii.	Construction of Gymnasium	
	iii.	Construction of Library Building	
	iv.	Upgradation of Facilities at Hostel	
	v.	Upgradation of Furnitures and teaching aids at Classrooms	
	vi.	Repair of pathway, boundary wall and landscape	
	vii.	Maintenance of the Training Institute complex for 5 years	
	viii.	Establishment of Firing Range for training of Forest Guards and Forester trainees of keonjhar Division in particular and State in general for better protection of forest and wildlife	Site to be provided by the Forst Department for Establishment of Firing Range.
		a. Land clearance and levelling if required and fencing of firing range	To be done after Establishment of Firing Range.
		b. Ammunition and Arms required for training	
		c. Arms Training Instructor (Retired Army or Armed force personnel) for training and maintenance.	To be provided after Establishment of Firing Range.
2	Jana Surakshya Gaja Rakshya:- Solar fencing (2 Km in one village) to be taken up either on Community mode or VSS mode or private farmers land as per Socio- economic — politico dynamics of the village. The Subsidy component in either case to be borne by user Agency		To be done by the User Agency
3	Provision of Hired Vehicle with Driver and POL for Anti — depredation cum- anti-poaching Squad. The proposed cost is: Vehicle:- @31, 000/per month = 31000 x 12 x 5 = Rs. 18,60,000; POL:- @15,000/- per month = 15,000 x 12 x5= Rs. 9,00,000/-		We have been providing vehicle to the local forest officials for anti-depredation cum anti-poaching.
4	Provision of Vehicle: One vehicle as per requirement of Forest department will be provided by the User Agency for use in the Wildlife Head Office		We have provided Yodha vehicles to the forest Department for the purpose mentioned.



Nicholson Forest Training School Champua





Badminton Court of NFTS



Auditorium Building



Multipurpose Building (Gym, Library and Office)



Training Hall of NFTS



OFFICE OF THE DIVISIONAL FOREST OFFICER, KEONJHAR DIVISION

Phone No- 06766-254315, email ID- dfo.keonjhar@odisha.gov.in

Memo No. 3449 /6F-Mining-73/2020
Dated, Keonjhar the 27th April, 2024

To

The Regional Chief Conservator of Forests,
Rourkela Circle, Rourkela.

Sub:

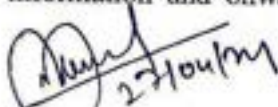
Re-drawing of Safety Zone consideration Katamati Iron Ore Mines of Keonjhar District, Odisha and Noamundi Iron Ore Mines of Jharkhand State of both M/s Tata Steel Ltd.

X-Sub

Submission of compliance on EDS raised by the MoEF&CC, GoI, New Delhi though online.


This is to inform you that, the user agency i.e. the Chief Joda, M/s Tata Steel Ltd. has submitted the compliance on the above EDS through online. After scrutiny of the aforesaid EDS vis-à-vis the compliance submitted by the user agency, the detail compliance report in this regard is sent herewith for favour of your kind information and onwards transmission to the proper quarter.

Encl: As above.


27/04/24
Divisional Forest Officer,
Keonjhar Division.

Memo No. 3450 /Dated 27.04.2024
26/4

Copy along with copy of compliance report submitted to the Principal Chief Conservator of Forests, FD&NO, FC Act, O/o-the PCCF, Odisha, Bhubaneswar for favour of kind information and necessary action.


27/04/24
Divisional Forest Officer,
Keonjhar Division.

Memo No. 3451 /Dated 27.04.2024
26/4

Copy forwarded to the Chief Joda, M/s Tata Steel Ltd., At/PO- Joda, Keonjhar for favour of kind information and necessary action.


27/04/24
Divisional Forest Officer,
Keonjhar Division.

26/4

5. **Status of reclamation measures undertaken by the user agency in their lease area as per provisions provided in the Progressive Mine Closure Plan may be provided.**

The User Agency has submitted the compliance mentioning that afforestation measures inside the lease area have been taken involving the local community as per approved progressive mine closure plan. Further the PMCP returns for 2020-21, 2021-22 submitted by the User Agency are enclosed herewith as **Annexure-V**. The photographs of afforestation measures submitted by the User Agency are also enclosed as **Annexure-VI**. But no reclamation of mine has been taken up by the User Agency as the User Agency has obtained the Stage-II approval during the year 2021 for the above mine.

6. **The state government shall ensure that no further proposal will be submitted in respect of the mine for land use required vis-a-vis mineable reserve in the area.**

Noamundi Iron Mine and Katamati Iron Mine are a part of the same Iron Ore deposit but are under two different leases on two States i.e. Jharkhand & Odisha State of M/s Tata Steel Ltd. because of the interstate boundary intersecting the deposits. This common boundary separates mine workings in Hill 5&6 of Noamundi (Sarbil-498 PF and Mahudi-744 PF) and Pit I of Katamati Iron Mine as shown in Map Annexed (**Annexure-I**). Since the deposit in both of these mines has been worked for a long time now, mining pit in Hill 5&6 of Noamundi and Pit-1 of Katamati, have progressed significantly within respective leases where necessary clearances were already available. But it is noteworthy that the common boundary which separates these two pits has now turned in to an island. As huge quantity of iron ore is locked under the common boundary, the User agency wants to carry mining operation in the said iron ore locked area. So, the User Agency has submitted the proposal for diversion of forest land over 0.9113 ha. for re-drawing the safety zone.

Further, the User Agency has intimated that the G1 exploration has been carried out over an area of 127.92 ha. out of total area 403.3238 ha. In the approved mining plan, exploration has been proposed in the remaining area i.e., 44 boreholes (1620mts with grid of 100m) to bring the entire mineralised area in to G1 level. The mineable area will be ascertained, after all mineralised area is brought to G1 level exploration. Accordingly, the area for mining and other components of land use pattern may be required to change. Hence, a new proposal of change in land use pattern would be required to be submitted for further approval.

7. **Status of implementation of various scheme/Plan (RWMP/SSWCP) and reasons/justification for non-compliance, if any, be furnished by the state government.**

The User Agency has deposited an amount of Rs 1,73,42,923.00 towards the Regional Wildlife Management Plan (RWMP in Compensatory Afforestation Fund (CAF), Orissa.). The funds under Regional Wildlife Management Plan are not allotted project wise. Rather it is allotted in whole and as per the interventions prescribed in the Regional Wildlife Management Plan of Bonai Division and Keonjhar Division.

The Site-Specific Wildlife Conservation Plan (SSWCP) for Katamati Iron Mine has been approved by PCCF(Wildlife) & Chief Wildlife Warden, Odisha vide his letter no. 5842/1WL(C)SSP/306/2011 dated 29.08.2011, in compliance to the Terms of Reference (ToR) for seeking Environmental Clearance (EC) for expansion to 8 million tonnes per Annum. The User Agency has deposited an amount of Rs 122 Lakhs to take up the interventions as mentioned in the

aforesaid Site Specific Wildlife Conservation Plan. Against the demand letter issued for carrying out activities by the State Forest Department, has been deposited to Compensatory Afforestation Fund (CAF), Orissa on 16.08.2013. The interventions as specified in the above Site specific Wildlife Conservation Plan has not been carried out due to non-receipt of funds. The fund has not been allotted as the Stage-II approval was accorded during the year 2021.

The current Site-Specific Wildlife Conservation Plan (SSWCP) for Katamati Iron Mine has been approved by PCCF(Wildlife) & Chief Wildlife Warden, Odisha vide his letter no. 7924/CWLW-FDWC-FD-0021-2021 dated 14th July 2023. in compliance to the Terms of Reference (ToR) for seeking Environmental Clearance (EC) for expansion from 8.00 to 13.5 million tonnes per Annum.

The User Agency has deposited, an amount of Rs.301.968 lakh in CAMPA account through online vide UTR no. HDFCR52023081780432709 dated 17.08.2023 to take up the interventions by the Forest Department. The interventions earmarked to take up by the Forest Department, will be carried out component wise on receipt of required funds from the PCCF & HoFF, Odisha. The activities to be undertaken by Project Proponent is being complied. The fire fighting blowers, Air cooler petrol engines, spotlights etc. are handed over to the forest dept as a part of compliance to the SSWLCP. The letter of handing over is enclosed as **Annexure-VIIA**. The photographs of the same is enclosed as **Annexure-VIIB**.

8. **It is observed that the proposal for change in land use is not only limited to area located in the safety zone, as proposed by the State; the proposal for change in land use extends to almost all project components. Therefore, proposal in its present form cannot be considered for approval and accordingly requested that State Government may submit a revised proposal recasting details of all land uses proposed to be changed in the proposal, as per the land use envisaged in the approved Mining Plan of the mining lease.**

As intimated by the User Agency, initially, based on the Guideline No. F. No:11-125/2014-FC issued by MoEF&CC dated 2nd Feb 2018 and para 7.9 (ii) of Handbook issued by MoEF&CC dated 28th March 2019, the user agency has applied offline application to redraw the safety zone in the letter format vide their letter No.GM/PL/186/105-A dated 28.06.2022(**Annexure-VIII**). An alternative equivalent area of width 7.5m kept as safety zone in southern side of mining lease of Katamati iron mine over an area of 0.98 ha to compensate the area proposed for mining within the safety zone area of 0.9113 ha. The map of the same is enclosed as **Annexure-IX**. The proposal recommended for redrawing of safety zone to Regional Chief Conservator of Forests, Rourkela vide this office letter no 10225/Mining-103/2021 dated 26.12.2022 after document verification and site inspection. The detailed report is enclosed as **Annexure-X**. The Regional Chief Conservator of Forests, Rourkela recommended the above proposal to the Principal Chief Conservator of Forests (Forest Diversion & Nodal Officer, FC Act) vide his letter no 65/3F-184/2023 dated 09.01.2023 which is enclosed as **Annexure -XI**. The Principal Chief Conservator of Forests and HOFF, returned the offline application for redrawing safety zone over 0.9113ha and advised us submit the proposal through online mode in Form-E(part-I) of Parivesh 2.0 vide letter no.9189/9F(MG)51/2021 dated 11.05.2023. Subsequently, online application for redrawing of safety zone and change in land use of safety zone over 0.9113ha was submitted in Form E vide our proposal no. FP/OR/REDIV/429499/2023.

Hence, it may be noted that as per the facts and chronology of the proposal stated above, the process of offline submission had started before the approval of current mining plan for period 2023-24 to 2027-28. Therefore, proposal in its present form is specific to change in land use of safety zone for mining along common boundary in compliance to above observations.



Concrete Road constructed within the Mining lease area



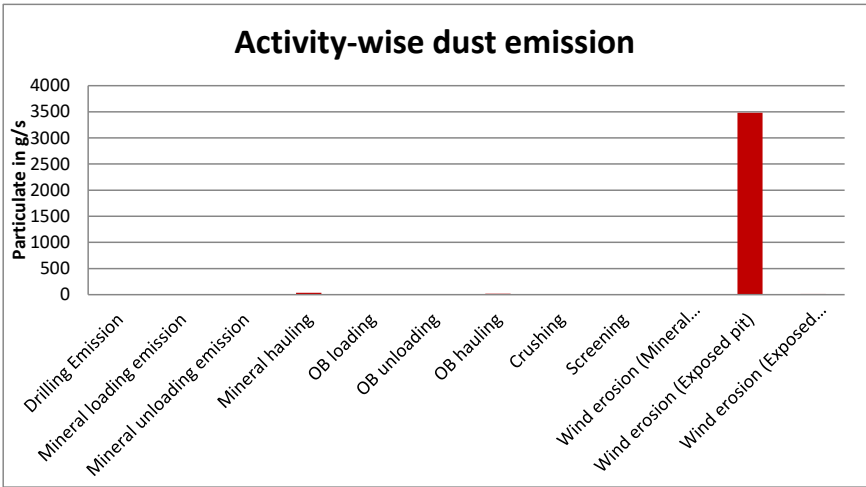
Vacuum Sweeping Machine in Operation



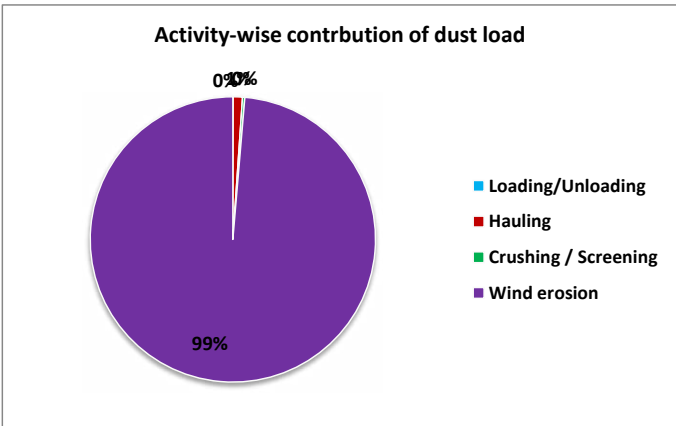
Drilling Machine Operation with water injection system

RESULTS OF DUST LOAD CALCULATIONS

	Particulate matter in (g/s)	Particulate matter in (kg/d)	Particulate matter (kg per ton of ore)
Drilling Emission	0.07673275	4.557925099	0.000145449
Mineral loading emission	0.35613693	21.15453341	0.000675066
Mineral unloading emission	0.48050705	28.54211849	0.000910812
Mineral hauling	36.4464334	2164.918144	0.069085048
OB loading	0.60752765	36.0871422	0.001151583
OB unloading	0.52098921	30.94675914	0.000987547
OB hauling	17.3552635	1030.902653	0.032897299
Crushing	5.38720539	320	0.010211571
Screening	8.08080808	480	0.015317356
Wind erosion (Mineral stack)	0	0	0
Wind erosion (Exposed pit)	3479.22808	300605.3065	9.592663833
Wind erosion (Exposed OB dump)	14.4363728	1247.302611	0.039802872
Total	3562.976	305969.72	9.7638484



Major Activity	Dust load (kg/day)
Loading/Unloading	116.730553
Hauling	3195.8208
Crushing / Screening	800
Wind erosion	301852.609



GO TO MAIN PAGE

GO TO DATA ENTRY PAGE



*LAND USE/ LAND COVER MAPPING
FOR KATAMATI IRON MINE OF M/s.
TATA STEEL LTD. AT-BARBIL, DIST-
KEONJHAR, ODISHA.*

September 2024

**LAND USE / LAND COVER MAPPING
OF MINE AND 5 K.M BUFFER ZONE
OF KATAMATI IRON MINE OF
M/s. TATA STEEL LTD. AT-BARBIL
DIST- KEONJHAR, ODISHA.**

Prepared for:

M/S TATA STEEL LTD.

OMQ DIVISION
NOAMUNDI, WEST SINGHBHUM
JHARKHAND

Prepared by:

M/s- Digital Cartography and Services Pvt. Ltd.

Authorized By ORSAC
1015, Bhagabat Sandhan, GGP Canal Road, Bhubaneswar – 751025

SEPTEMBER-2024

1. BACKGROUND

Tata Steel Limited holds the Katamati Iron Mine lease over an area of 403.3238 ha located in Keonjhar district of Odisha state and is being worked for winning of iron ore. The Katamati Iron Mine lease was originally granted on 17.01.1933 for 30 years over an area of 12.17 sq. miles (3152.018 ha) including Joda West and Khondbond Blocks. It was renewed on 17.01.1963 for a period of 20 years over the same area. During the second renewal, Katamati formed an independent lease over an area of 403.3238 ha and renewed for a period of 20 years with effect from 17.01.1983. The third renewal of the mining lease was applied on 05.09.2001 for a period of 20 years with effect from 17.01.2003. However, in view of the Mines and Minerals (Development & Regulation) Amendment Act 2015, the lease period has been extended upto 31.03.2030 by Steel & Mines Department, Govt. of Odisha.

Katamati iron deposit lies in the western portion of Singhbhum-Orissa craton. The Iron Ore Group (IOG) surrounds the batholithic complex and consists of low-grade meta-sediments, acid-intermediate and mafic volcanic and sills. The IOG rocks are exposed in three major basins around the Singhbhum granite batholiths. The eastern basin extends from south of Jamshedpur through Gorumahisani-Badampahar and extends southward up to near Nausahi. The southern basin lies between Daitari-Tomka, while the northern-western basin is represented by the western Singhbhum-Bonai-Keonjhar Iron Ore basin which extends for about 100km in length and 20 to 30km width in NNE-SSW direction from Chakradharpur to south of Koira.

The mine was initially worked manually by open cast method and subsequently operation was discontinued in 1966. The mine was restarted in 1974 with semi-mechanized operation and during 2000-02 it became fully mechanized. Currently, the mine has production capacity (Run Of Mine) of 8 MTPA for which Environment Clearance has already been obtained ROM is being sent to the processing plant (Both Wet and Dry plant) of Noamundi (It is located in the adjoining of Katamati) in which the ore of both the mine is fed simultaneously. The finished product is being sent to the steel plant through company's own railway siding located at Bottom bin area of Noamundi. The slime generated is kept in the slime dam located at Noamundi only. Rest ROM is fed to the Dry Crushing and Screening Plant located at Katamati. The finished product is being sent to the steel plant through railway siding either through Noamundi or through public siding. Katamati Iron Mine lease is captive and the ore mainly feeds to its steel plant at Jamshedpur, Meramandali and Kalinganagar along with sister concern company like Tata Sponge Iron Limited, TAYO Rolls.

2. OBJECTIVE

- Interpretation of the satellite Image and identification of the present land use pattern in surrounding area (5 km buffer area from the Project area)
- Integration of the topographical features from ortho-rectified Satellite Image
- Generation of Land use / Land cover maps for the Project area and its 5km Buffer Zone

3. SCOPE OF WORK

- a. Procurement of High resolution Latest Satellite image for the Project area
- b. Satellite image interpretation, digital image analysis and pre-field map generation
- c. Generation of Base Map for the study area
- d. Generation of land use / land cover map for the study area
- e. Post field processing and incorporation of ground truth information on maps
- f. Finalization of land use/ land cover map
- g. Generation of land use statistics
- h. Preparation of final maps and reports

4. METHODOLOGY

Selection & Procurement of Satellite Data

High-resolution satellite images of multispectral sensors were selected for the Project area. Selection of the cloud free satellite images were executed through browsing of the available satellite images in the utility provided by the National Remote Sensing Centre (NRSC), Hyderabad. The details of the satellite images procured for the study area are as follows:-

- a. Satellite Image: Resourcesat-II , Multispectral LISS IV FX (5.0 meter resolution)
Path/Row : 105 / 56-D
Date of Pass: 10 May 2024
- b. Satellite Image : Cartosat-II-E, Multispectral (1.65meter resolution)

Path/ Row: 36743/63	Path/ Row: 36743/64
Date of Pass: 07 FEB 2024	Date of Pass: 07 FEB 2024

Path/ Row: 36743/65	
Date of Pass: 07 FEB 2024	

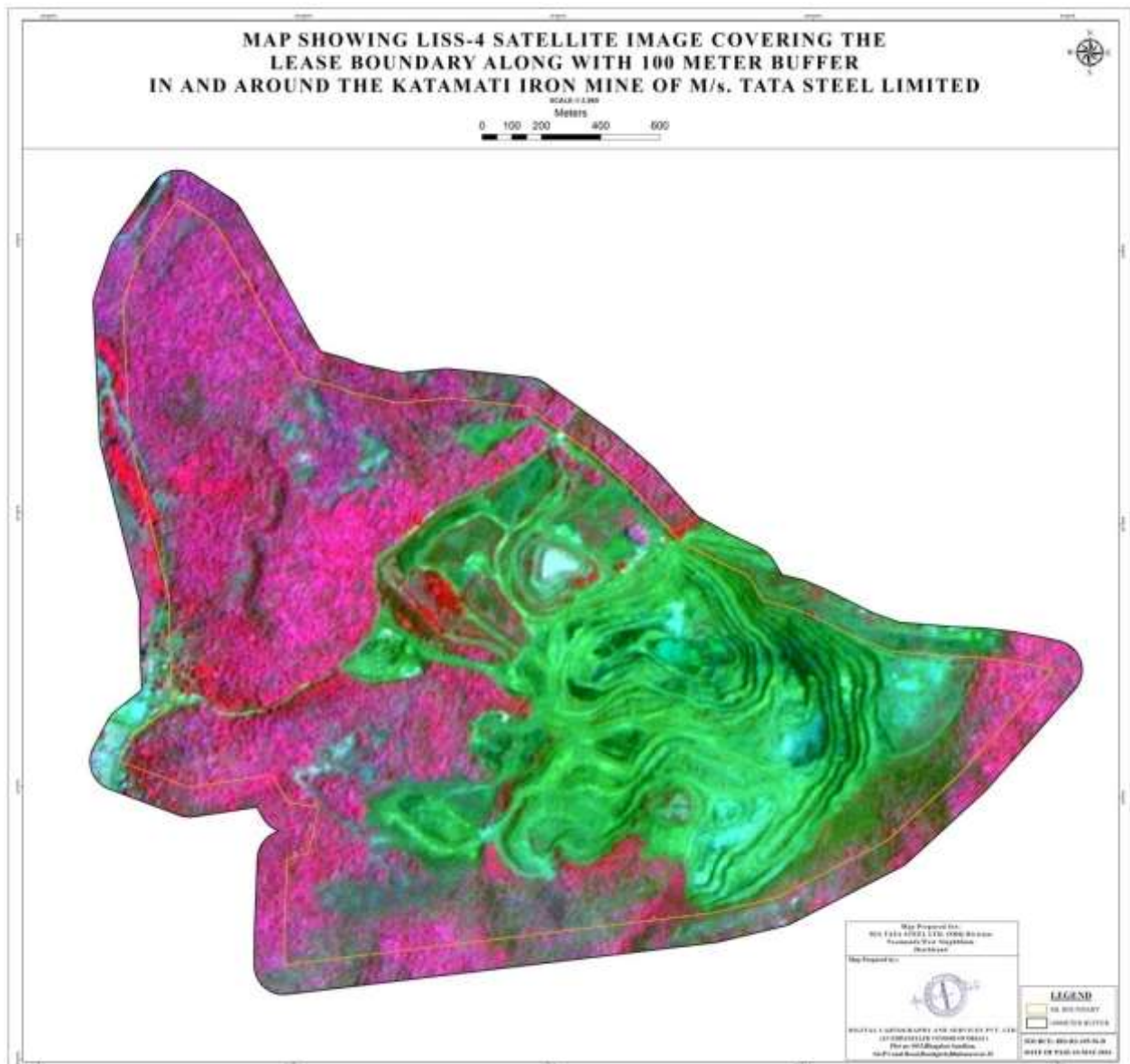


Fig-1: LISS-IV Satellite Image of Katamati Iron Mine

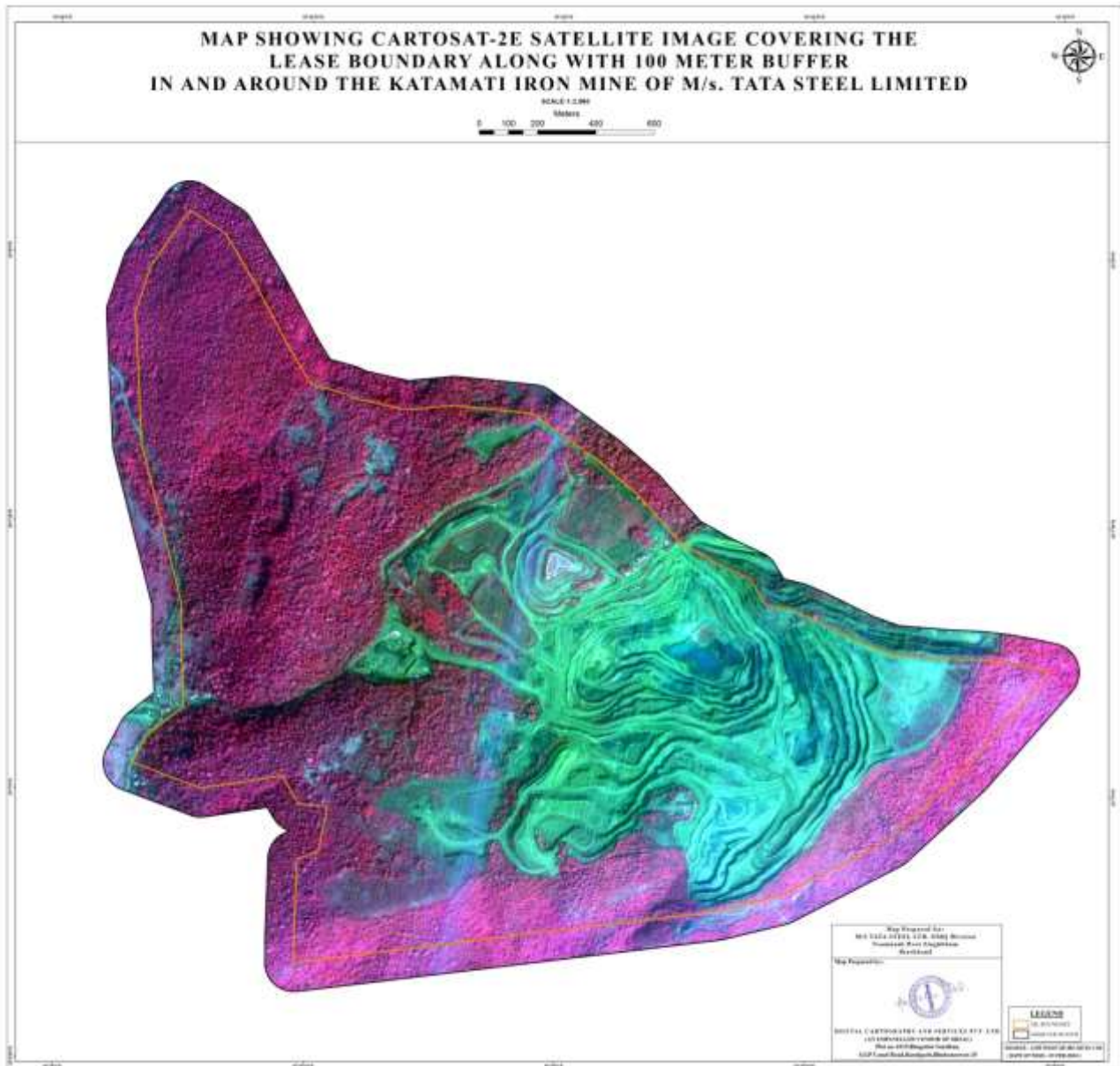


Fig-2: Cartosat Image of Katamati Iron Mine

LEVEL I	LEVEL II	LEVEL III
BUILT-UP LAND	SETTLEMENT	URBAN SETTLEMENT
		RURAL SETTLEMENT
	TRANSPORT	NATIONAL HIGHWAY
		ROAD
		RAILWAYLINE/RAILWAY SLIDING
AGRICULTURAL LAND	CROP LAND	CROP LAND
FOREST & VEGETATION	FOREST	OPEN FOREST
		SCRUB FOREST
		FOREST AREA
	NON FOREST	TREE COVER AREA
	FOREST	DENSE FOREST
VEGETATION AREA		
NON FOREST	PLANTATION AREA	
	WASTELAND	LAND WITH SCRUB
		AREA UNTOUCHED
LAND WITHOUT SCRUB		
MINES & INDUSTRY	QUARRY	QUARRY
	INFRASTRUCTURE	CW PLANT/SCREEN PLANT
		EQUIPMENT MAINTENANCE
	STOCK	ROM STOCK
		STOCK
		ORE STOCK
	DUMP	DUMP
		SUB GRADE DUMP
		WASTE DUMP
		MINERAL REJECT DUMP
	SLIME DAM	SLIME DAM
	INFRASTRUCTURE	MAGAZINE
		VIEW POINT
		INFRASTRUCTURE
	ADMINISTRATIVE	OFFICE INFRASTRUCTURE
	INFRASTRUCTURE	POWER HOUSE
		PARKING
THICKNER		
WEIGH BRIDGE		
INDUSTRIAL	SOLAR PLANT	
SAFETY ZONE	7.5 METER SAFETY ZONE ALONG WITH MINES BOUNDARY	
BUILT-UP-LAND	TRANSPORT	HAUL ROAD
		OTHER ROAD
	MINES SETTLEMENT	COLONY INFRASTRUCTURE
		CLUB HOUSE
	EDUCATIONAL	SCHOOL
	RECREATIONAL AREA	STADIUM
PLAYGROUND		
PARK		
WATERBODY	WATERBODY	WATER HARVESTING
		WATER RESERVOIR
		NALA
		POND
MINING AREA	MINING	OTHER MINING
	CRUSHER	CRUSHER
	PLANT	INDUSTRY

Table-1: Land Use / Land Cover classification

Pre-field Interpretation of Satellite Image

The satellite images were enhanced through application of image processing techniques to facilitate better interpretation through use of appropriate image processing software. The geo-rectified Multispectral Cartosat satellite image and the multispectral Resourcesat LISS IV Satellite images were merged together to obtain high-resolution multispectral satellite image having the characteristics of both the images in-terms of sharp features and vegetation signatures. The False Color Composition (FCC) of the merged satellite image along with the topographic sheet was used to identify the land features and delineate the land feature boundaries. The land features were identified on the image through their image characteristics such as tone, texture, color, shape, size, pattern and association.

Preparation of Pre-field Maps

The spatial datasets generated through interpretation of the satellite images, data extraction from the survey of India topographic maps were assembled with the help of a GIS software to generate map based thematic datasets. The thematic data sets were logically organized on the GIS base to generate the pre-field base maps as well as the land use/ land cover maps. The classification used for preparation of the map is depicted below:-

Ground Truth Collection

The Pre-field maps generated in the above process were subjected to a detailed study along with the satellite images and the survey of India topographic map sheets to assess the accuracy of the pre-field identification of land features and also identification of doubtful interpretations. About 35 numbers of uniformly distributed locations within the study area were identified on the maps for the purpose of site visit and Collection of ground truth. A detailed traverse plan was prepared using the existing road network to cover as many representative sample areas as possible to observe the broad land use features and field conditions. Detailed field observations and investigations for the identified sites were carried out and suitably marked on the maps.

Generation of Final Map

The results obtained in the ground Survey exercise were applied to the pre-field maps for carrying out the required modifications. The modified thematic data layers were used to generate the base maps as well as the land use map. The final interpreted and classified maps were subjected to cartography for generation of maps. The map features were colored with the standard map color code and were provided with appropriate symbols to represent the map features. Each of the land classes were provided with identification colors and suitably represented with map legend.

5. RESULTS

Mine area:

The land use statistics for the mine area of the Iron lease area was calculated as per the level-III land classification standards and is tabulated as follows the distribution of different land use/ land cover classes of the core area is depicted below:-

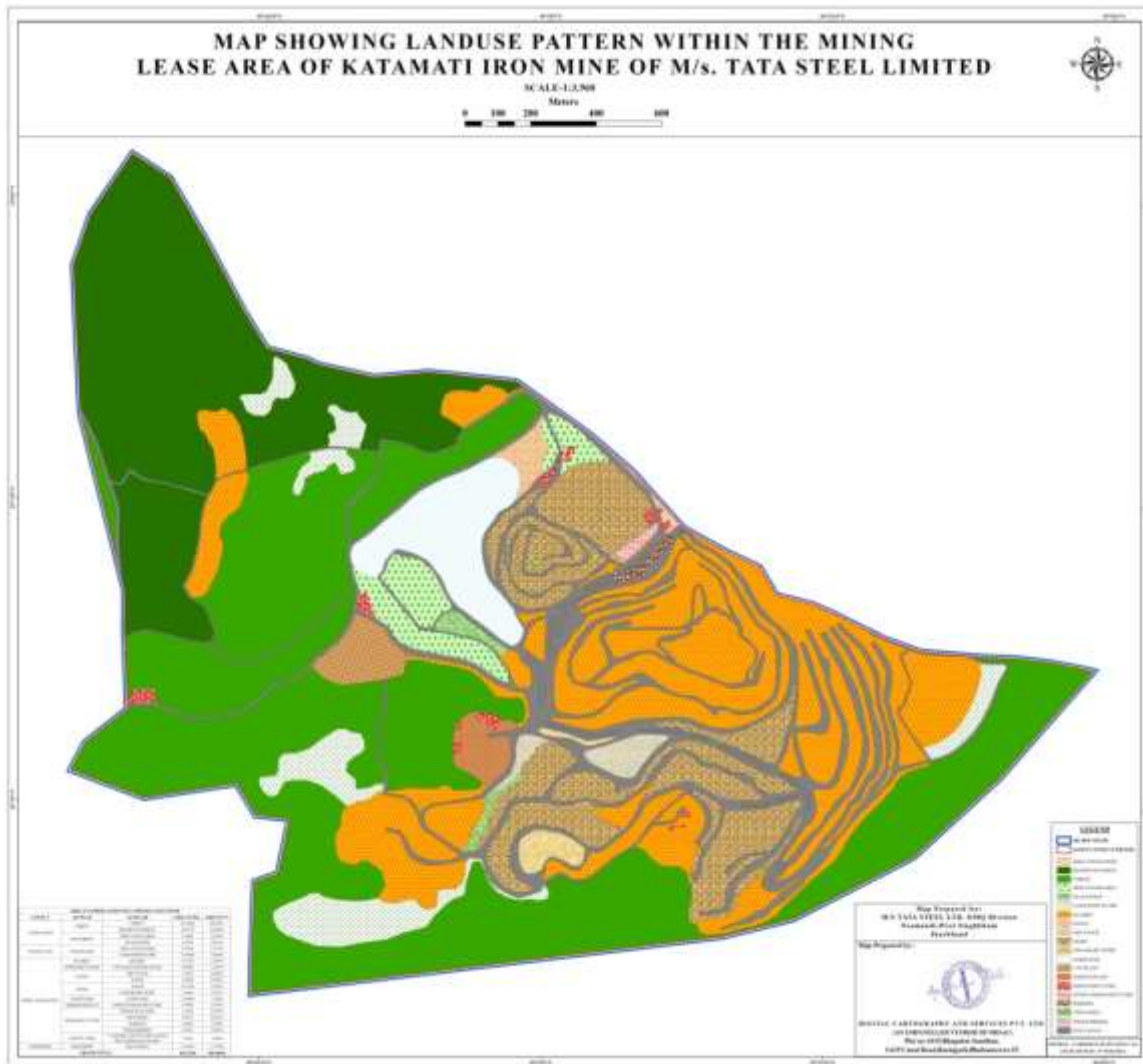


Fig-3: Landuse/ Landcover Map of Mine Area

AREA CLASSIFICATION OF LANDUSE/ LAND COVER				
LEVEL I	LEVEL II	LEVEL III	AREA IN HA.	AREA IN %
VEGETATION	FOREST	FOREST	123.6861	30.667%
		RESERVED FOREST	64.6770	16.036%
	NON FOREST	TREE COVER AREA	8.1680	2.025%
		PLANTATION	1.6750	0.415%
WASTELAND	WASTELAND	AREA UNTOUCHED	0.7140	0.177%
		LAND WITH SCURB	15.8360	3.926%
MINES & INDUSTRY	QUARRY	QUARRY	72.1593	17.891%
	INFRASTRUCTURE	CW PLANT/SCREEN PLANT	6.6020	1.637%
	STOCK	ORE STOCK	2.6870	0.666%
		STOCK	1.6480	0.409%
	DUMP	DUMP	33.3540	8.270%
		SUB GRADE DUMP	1.8446	0.457%
	SLIME DAM	SLIME DAM	12.9480	3.210%
	ADMINISTRATIVE	OFFICE INFRASTRUCTURE	0.5030	0.125%
	INFRASTRUCTURE	INFRASTRUCTURE	1.4630	0.363%
		VIEW POINT	0.0517	0.013%
		PARKING	0.4860	0.120%
		WEIGH BRIDGE	0.0120	0.003%
	SAFETY ZONE	7.5 METER SAFETY ZONE ALONG WITH MINES BOUNDARY	7.3641	1.826%
TRANSPORT	TRANSPORT	HAUL ROAD	47.4450	11.764%
GRAND TOTAL			403.3238	100.000%

Table-2: Land Use/ Land cover distribution in Mine Area

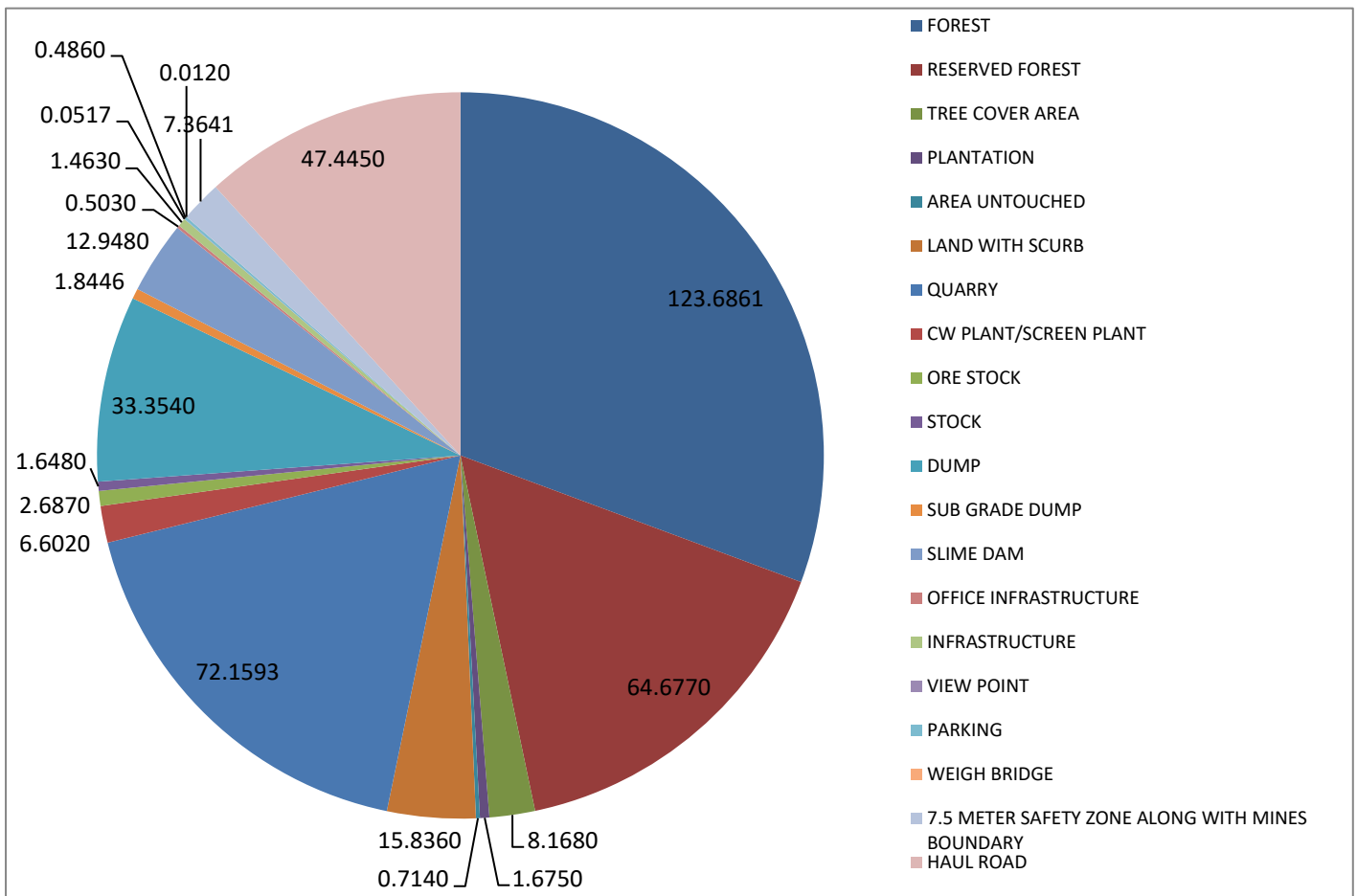


Fig-4: Distribution of Land Use / Land Cover in Mine Area

Buffer area:

The land use statistics for the 5 km buffer area from the periphery of the Iron or lease area was calculated as per the level-III land classification standards and is tabulated as follows. The distribution of different land use/ land cover of the buffer area is depicted below:-

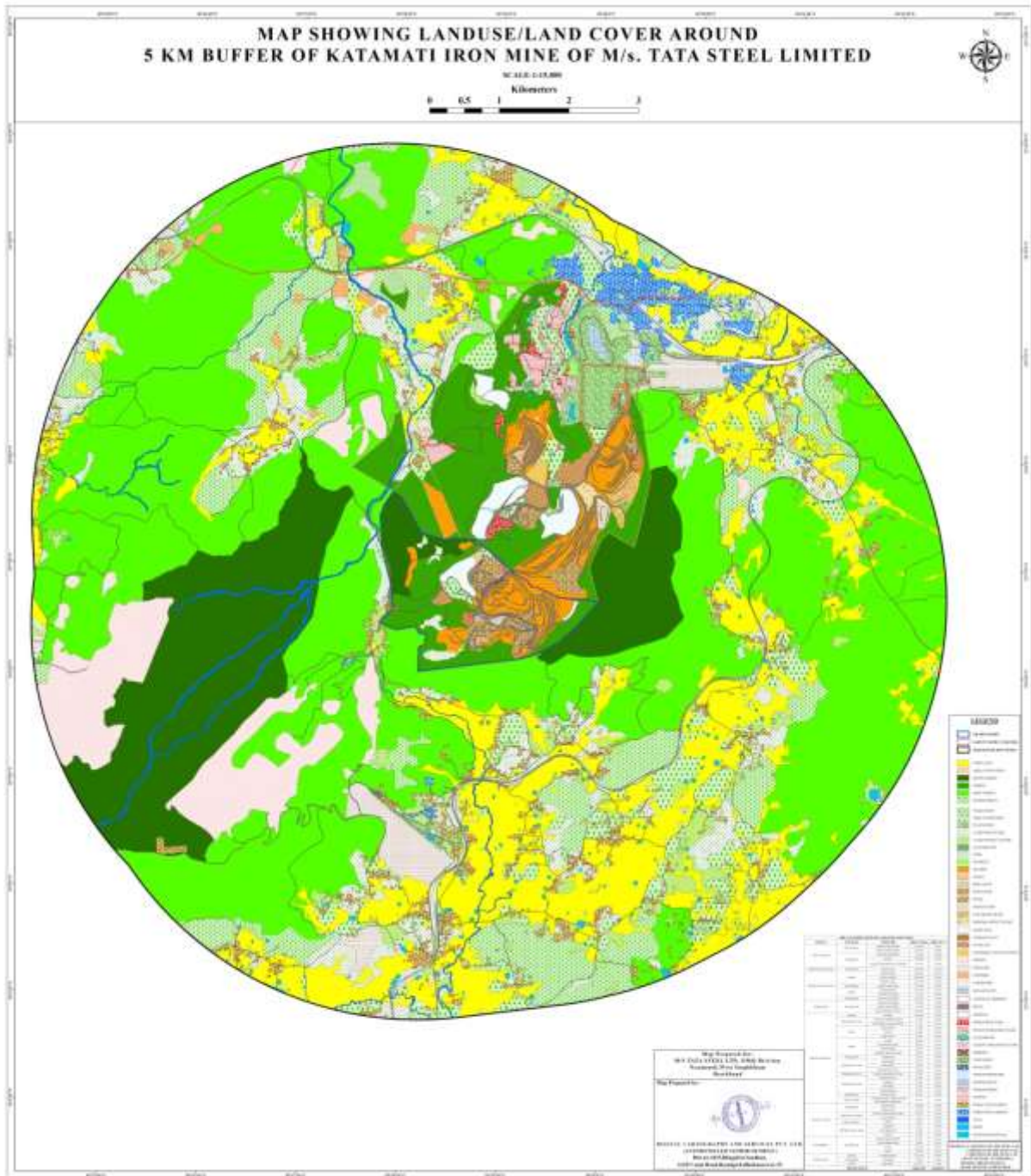


Fig-5: Land Use / Land Cover Map of Buffer Area

AREA CLASSIFICATION OF LAND USE/LAND COVER				
LEVEL I	LEVEL II	LEVEL III	AREA IN HA.	AREA IN %
BUILT-UP LAND	SETTLEMENT	URBAN SETTLEMENT	125.6170	0.977%
		RURAL SETTLEMENT	321.5040	2.499%
	TRANSPORT	NATIONAL HIGHWAY	10.2800	0.080%
		ROAD	163.0080	1.267%
		RAILWAYLINE/RAILWAY SLIDING	49.3450	0.384%
AGRICULTURAL LAND	CROP LAND	CROP LAND	1638.2810	12.735%
FOREST & VEGETATION	FOREST	OPEN FOREST	4478.8231	34.817%
		SCRUB FOREST	892.6880	6.939%
		FOREST AREA	610.5730	4.746%
	NON FOREST	TREE COVER AREA	571.7850	4.445%
	FOREST	DENSE FOREST	1114.1800	8.661%
		VEGETATION AREA	31.4310	0.244%
NON FOREST	PLANTATION AREA	144.8270	1.126%	
	WASTELAND	LAND WITH SCRUB	736.8870	5.728%
AREA UNTOUCHED		0.7130	0.006%	
LAND WITHOUT SCRUB		336.8750	2.619%	
MINES & INDUSTRY	QUARRY	QUARRY	198.8460	1.546%
	INFRASTRUCTURE	CW PLANT/SCREEN PLANT	47.3550	0.368%
		EQUIPMENT MAINTENANCE	7.3140	0.057%
	STOCK	ROM STOCK	2.7562	0.021%
		STOCK	4.0980	0.032%
		ORE STOCK	2.6870	0.021%
	DUMP	DUMP	66.2240	0.515%
		SUB GRADE DUMP	18.8230	0.146%
		WASTE DUMP	6.0390	0.047%
		MINERAL REJECT DUMP	6.8790	0.053%
	SLIME DAM	SLIME DAM	74.5720	0.580%
	INFRASTRUCTURE	MAGAZINE	0.3677	0.003%
		VIEW POINT	1.5160	0.012%
		INFRASTRUCTURE	20.8480	0.162%
	ADMINISTRATIVE	OFFICE INFRASTRUCTURE	3.7700	0.029%
	INFRASTRUCTURE	POWER HOUSE	0.2960	0.002%
		PARKING	0.8720	0.007%
		THICKNER	1.1360	0.009%
		WEIGH BRIDGE	0.0120	0.000%
	INDUSTRIAL	SOLAR PLANT	8.2924	0.064%
SAFETY ZONE	7.5 METER SAFETY ZONE ALONG WITH MINES BOUNDARY	26.3760	0.205%	
BUILT-UP-LAND	TRANSPORT	HAUL ROAD	126.8610	0.986%
		OTHER ROAD	21.5910	0.168%
	MINES SETTLEMENT	COLONY INFRASTRUCTURE	52.7270	0.410%
		CLUB HOUSE	1.2780	0.010%
	EDUCATIONAL	SCHOOL	0.6673	0.005%
	RECREATIONAL AREA	STADIUM	2.5313	0.020%
		PLAYGROUND	2.1638	0.017%
PARK		0.6169	0.005%	
WATERBODY	WATERBODY	WATER HARVESTING	2.9440	0.023%
		WATER RESERVOIR	2.6500	0.021%
		NALA	104.2300	0.810%
		POND	52.9550	0.412%
MINING AREA	MINING	OTHER MINING	578.2370	4.495%
	CRUSHER	CRUSHER	39.0540	0.304%
	PLANT	INDUSTRY	149.5170	1.162%
GRAND TOTAL			12863.9197	100.000%

Table-3: Land Use / Land Cover distribution in Buffer Area

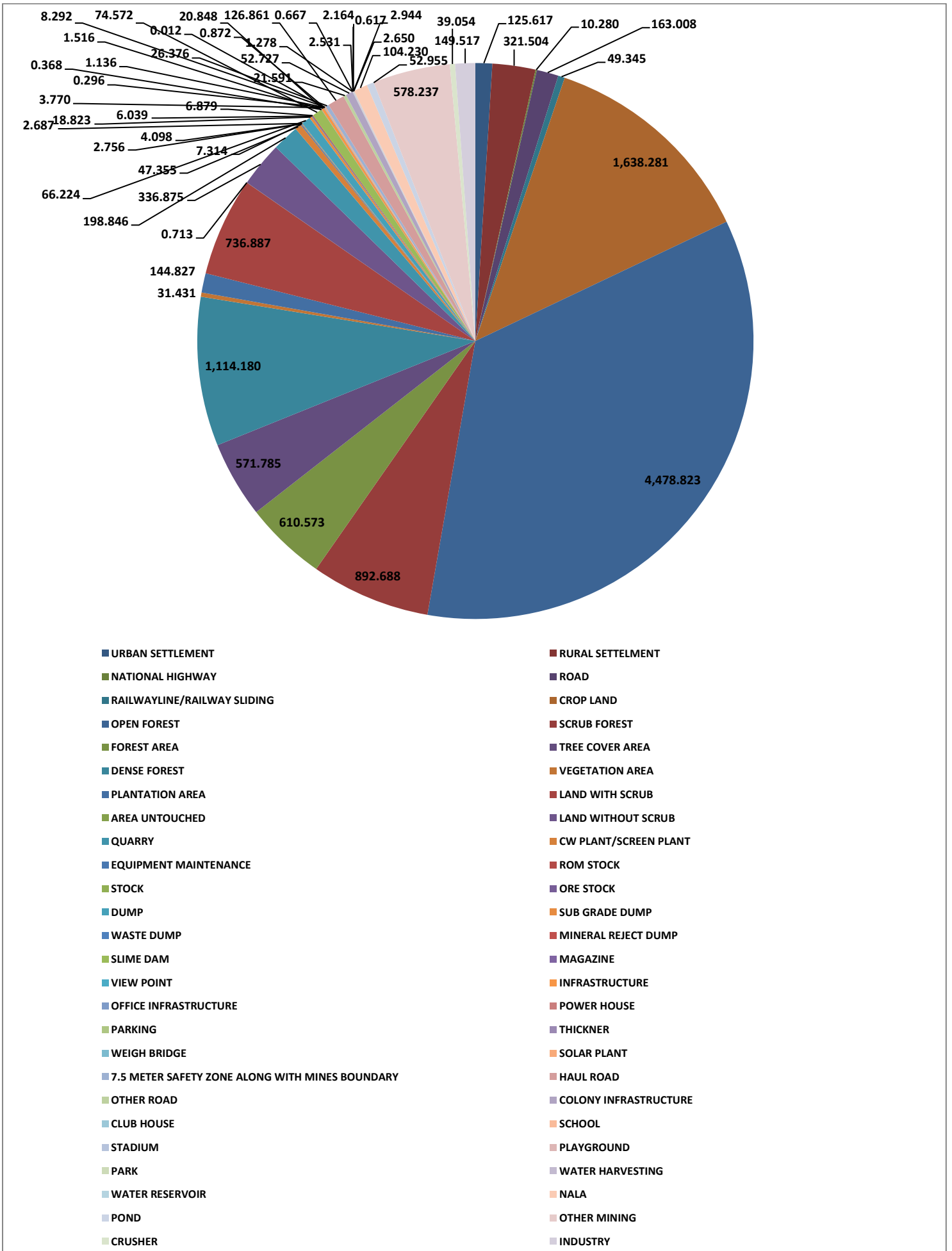


Fig-6: Distribution of Land Use/ Land Cover in Buffer Area

ANNEXURE-XIII

Summarised Fugitive Dust Monitoring Report					
Katamati Iron Ore Mine of M/s Tata Steel Limited					
Period: October 2025 to March 2026					
Mine Location	Sampling Location	Month	Unit	Results	Norms
Katamati Iron Ore Mine	Crushing & Screening Plant	October 2025	µg/m ³	566.30	1200
		November 2025	µg/m ³	509.25	1200
		December 2025	µg/m ³	571.00	1200
		January 2026	µg/m ³	488.00	1200
		February 2026	µg/m ³	613.25	1200
		March 2026	µg/m ³	635.53	1200
	Loading & Stacking	October 2025	µg/m ³	467.50	1200
		November 2025	µg/m ³	465.87	1200
		December 2025	µg/m ³	518.00	1200
		January 2026	µg/m ³	534.80	1200
		February 2026	µg/m ³	582.81	1200
		March 2026	µg/m ³	655.83	1200
	Haul Road	October 2025	µg/m ³	442.70	1200
		November 2025	µg/m ³	322.87	1200
		December 2025	µg/m ³	483.00	1200
		January 2026	µg/m ³	582.40	1200
		February 2026	µg/m ³	658.50	1200
		March 2026	µg/m ³	676.13	1200
	Waste Dump Site	October 2025	µg/m ³	326.20	1200
		November 2025	µg/m ³	412.87	1200
		December 2025	µg/m ³	400.00	1200
		January 2026	µg/m ³	596.10	1200
		February 2026	µg/m ³	705.95	1200
		March 2026	µg/m ³	696.43	1200
	Mining Face (Near Drill)	October 2025	µg/m ³	571.50	1200
		November 2025	µg/m ³	614.75	1200
		December 2025	µg/m ³	666.00	1200
		January 2026	µg/m ³	612.90	1200
		February 2026	µg/m ³	678.81	1200
		March 2026	µg/m ³	704.19	1200
Exit Gate	October 2025	µg/m ³	463.30	1200	
	November 2025	µg/m ³	381.12	1200	
	December 2025	µg/m ³	465.00	1200	
	January 2026	µg/m ³	579.00	1200	
	February 2026	µg/m ³	615.23	1200	

		March 2026	µg/m3	699.61	1200
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Dry-fog system installed at Crushing & Screening Plant

ANNEXURE-XII

Summarised Ambient Air Quality Monitoring Report								
Katamati Iron Ore Mine of M/s Tata Steel Limited								
Period: October 2025 to March 2026								
Mine location	Sampling location	Month	Range	Results in µg/m ³				
				PM10	PM2.5	SO2	NOx	CO
Katamati Iron Ore Mine	Murga Gate	Oct 25	Avg.	62.8	22.9	12.2	18.7	BLQ (LOQ-0.5)
		Nov 25	Avg.	60.7	23.7	9.9	14.1	BLQ (LOQ-0.5)
		Dec 25	Avg.	60.4	25.4	8.3	18.3	BLQ (LOQ-0.5)
		Jan 26	Avg.	62.2	27.3	18.2	20.0	BLQ (LOQ-0.5)
		Feb 26	Avg.	70.2	29.6	19.4	25.1	BLQ (LOQ-0.5)
		Mar 26	Avg.	72.6	29.0	14.5	19.7	BLQ (LOQ-0.5)
	OB Dump	Oct 25	Avg.	64.5	23.9	15.7	21.9	BLQ (LOQ-0.5)
		Nov 25	Avg.	70.4	29.0	13.4	18.6	BLQ (LOQ-0.5)
		Dec 25	Avg.	67.7	24.1	17.8	20.5	BLQ (LOQ-0.5)
		Jan 26	Avg.	69.3	26.2	17.1	20.4	BLQ (LOQ-0.5)
		Feb 26	Avg.	72.0	28.3	12.9	13.8	BLQ (LOQ-0.5)
		Mar 26	Avg.	73.1	32.6	8.5	12.1	BLQ (LOQ-0.5)
	Viewpoint	Oct 25	Avg.	63.9	26.9	13.4	21.6	BLQ (LOQ-0.5)
		Nov 25	Avg.	62.5	26.0	10.8	14.9	BLQ (LOQ-0.5)
		Dec 25	Avg.	65.2	22.5	15.4	18.7	BLQ (LOQ-0.5)
		Jan 26	Avg.	66.4	24.6	9.7	13.9	BLQ (LOQ-0.5)
		Feb 26	Avg.	72.2	26.5	9.8	12.3	BLQ (LOQ-0.5)
		Mar 26	Avg.	74.8	28.9	8.1	12.0	BLQ (LOQ-0.5)
	Pit Office	Oct 25	Avg.	62.0	23.0	12.6	18.9	BLQ (LOQ-0.5)
		Nov 25	Avg.	58.5	24.9	9.4	13.5	BLQ (LOQ-0.5)
		Dec 25	Avg.	64.9	23.7	15.3	13.2	BLQ (LOQ-0.5)
		Jan 26	Avg.	66.4	25.4	13.0	22.7	BLQ (LOQ-0.5)
		Feb 26	Avg.	72.2	27.2	17.0	22.1	BLQ (LOQ-0.5)
		Mar 26	Avg.	74.1	36.0	13.6	17.8	BLQ (LOQ-0.5)

ANNEXURE-XI

Summarised Ambient Air Quality Monitoring Report of Buffer Zone								
Katamati Iron Ore Mine of M/s Tata Steel Limited								
Period: October 2025 to March 2026								
Mine location	Sampling location	Month	Range	Results in µg/m ³				
				PM10	PM2.5	SO ₂	NO _x	CO
Noamundi Iron Ore Mine	Tankura Village	Oct 25	Avg.	61.7	21.3	12.7	20.2	BLQ (LOQ-0.5)
		Nov 25	Avg.	67.1	24.8	12.1	16.8	BLQ (LOQ-0.5)
		Dec 25	Avg.	71.6	28.7	8.5	17.9	BLQ (LOQ-0.5)
		Jan 26	Avg.	51.0	16.9	7.2	10.5	BLQ (LOQ-0.5)
		Feb 26	Avg.	49.0	17.7	5.9	7.8	BLQ (LOQ-0.5)
		Mar 26	Avg.	45.3	18.9	6.3	9.4	BLQ (LOQ-0.5)
	Miralgara Village	Oct 25	Avg.	63.3	21.5	16.8	23.2	BLQ (LOQ-0.5)
		Nov 25	Avg.	73.8	32.4	14.2	23.1	BLQ (LOQ-0.5)
		Dec 25	Avg.	73.8	29.4	8.4	17.3	BLQ (LOQ-0.5)
		Jan 26	Avg.	45.0	18.0	5.7	13.4	BLQ (LOQ-0.5)
		Feb 26	Avg.	56.5	18.7	5.7	8.0	BLQ (LOQ-0.5)
		Mar 26	Avg.	52.4	19.7	7.2	8.6	BLQ (LOQ-0.5)
	Kitabeda Village	Oct 25	Avg.	64.6	22.0	14.5	21.5	BLQ (LOQ-0.5)
		Nov 25	Avg.	63.7	23.6	12.7	19.6	BLQ (LOQ-0.5)
		Dec 25	Avg.	72.8	29.5	7.4	17.6	BLQ (LOQ-0.5)
		Jan 26	Avg.	51.7	21.2	12.1	13.5	BLQ (LOQ-0.5)
		Feb 26	Avg.	67.7	17.4	7.5	13.3	BLQ (LOQ-0.5)
		Mar 26	Avg.	48.3	19.7	5.7	8.3	BLQ (LOQ-0.5)
	Balita Village	Oct 25	Avg.	65.1	22.8	14.5	21.1	BLQ (LOQ-0.5)
		Nov 25	Avg.	59.2	20.6	11.1	17.1	BLQ (LOQ-0.5)
		Dec 25	Avg.	63.3	24.3	8.5	17.8	BLQ (LOQ-0.5)
		Jan 26	Avg.	48.9	23.7	6.8	10.4	BLQ (LOQ-0.5)
		Feb 26	Avg.	54.5	14.7	6.0	5.3	BLQ (LOQ-0.5)
		Mar 26	Avg.	49.3	18.3	6.0	8.8	BLQ (LOQ-0.5)

ANNEXURE-XI

Summarised Ambient Air Quality Monitoring Report of 12 Parameters of Core Zone						
Katamati Iron Ore Mine of M/s Tata Steel Limited						
Period: October 2025 to March 2026						
Parameters		February 2026				
		NAAQMS Standards	Near Murga Gate	Near OB Dump	Near Viewpoint	Near Pit Office
1	Particulate Matter (PM ₁₀)	100 (24 hrs)	71.2	73.2	63.6	73.3
2	Particulate Matter (PM _{2.5})	60 (24 hrs)	27.7	30.1	26.4	30.1
3	Sulphur dioxide	80 (24 hrs)	16.18	6.64	6.29	13.53
4	Oxides of Nitrogen	80 (24 hrs)	21.96	8.94	12.51	20.12
5	Carbon Monoxide (as CO)	2.0 (8 hrs)	BLQ (LOQ-0.5)	BLQ (LOQ-0.5)	BLQ (LOQ-0.5)	BLQ (LOQ-0.5)
6	Lead as Pb	1.0 (24 hrs)	BLQ (LOQ-0.2)	BLQ (LOQ-0.2)	BLQ (LOQ-0.2)	BLQ (LOQ-0.2)
7	Nickel as Ni	20.0 (annual)	BLQ (LOQ-10.0)	BLQ (LOQ-10.0)	BLQ (LOQ-10.0)	BLQ (LOQ-10.0)
8	Arsenic as As	6.0 (annual)	BLQ (LOQ-2.0)	BLQ (LOQ-2.0)	BLQ (LOQ-2.0)	BLQ (LOQ-2.0)
9	Ozone (as O ₃)	100 (8 hrs)	BLQ (LOQ-19.6)	BLQ (LOQ-19.6)	BLQ (LOQ-19.6)	BLQ (LOQ-19.6)
10	Ammonia (as NH ₃)	400 (24 hrs)	BLQ (LOQ-20.0)	BLQ (LOQ-20.0)	BLQ (LOQ-20.0)	BLQ (LOQ-20.0)
11	Benzene	5.0 (annual)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
12	Benzo-Pyrene	1.0 (annual)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)

Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

Authorised By :
Government of Jharkhand

Date : **10/01/2026**
Time : **13:27:29 PM**
Validity upto : **09/07/2026**



Certificate SL. No. : JH01002920002258
Registration No. : JH06M9994
Date of Registration : 04/Feb/2019
Month & Year of Manufacturing : February-2008
Valid Mobile Number : *****7757
Emission Norms : Not Available
Fuel : DIESEL
PUC Code : JH0100292
GSTIN :
Fees : Rs.300.00
MIL observation : No

Vehicle Photo with Registration plate
60 mm x 30 mm



Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon, (THC/HC)	ppm		
High idling emissions	CO	percentage (%)		
	RPM	RPM	2500 ± 200	
	Lambda	-	1 ± 0.03	
Smoke Density	Light absorption coefficient	1/metre	2.45	0.42
This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.				

Note : 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to <https://puc.parivahan.gov.in>

Authorised Signature with stamp of PUC Operator
60mm x 20 mm

HRISHIKESH KISAN SEWA KENDRA



Date/Time: Long at 13:42:35 October 7, 2025
 Trigger Source: Geo: 0.127 mm/s, Mic: 2.000 pa.(L)
 Range: Geo: 254.0 mm/s
 Record Time: 3.0 sec at 1024 sps
 Operator/Setup: Operator/factory.MMB

Serial Number: UM23076 V 10-90FB Micromate ISEE
 Battery Level: 3.8 Volts
 Unit Calibration: February 4, 2025 by UES New Delhi
 File Name: __TEMP.EVT

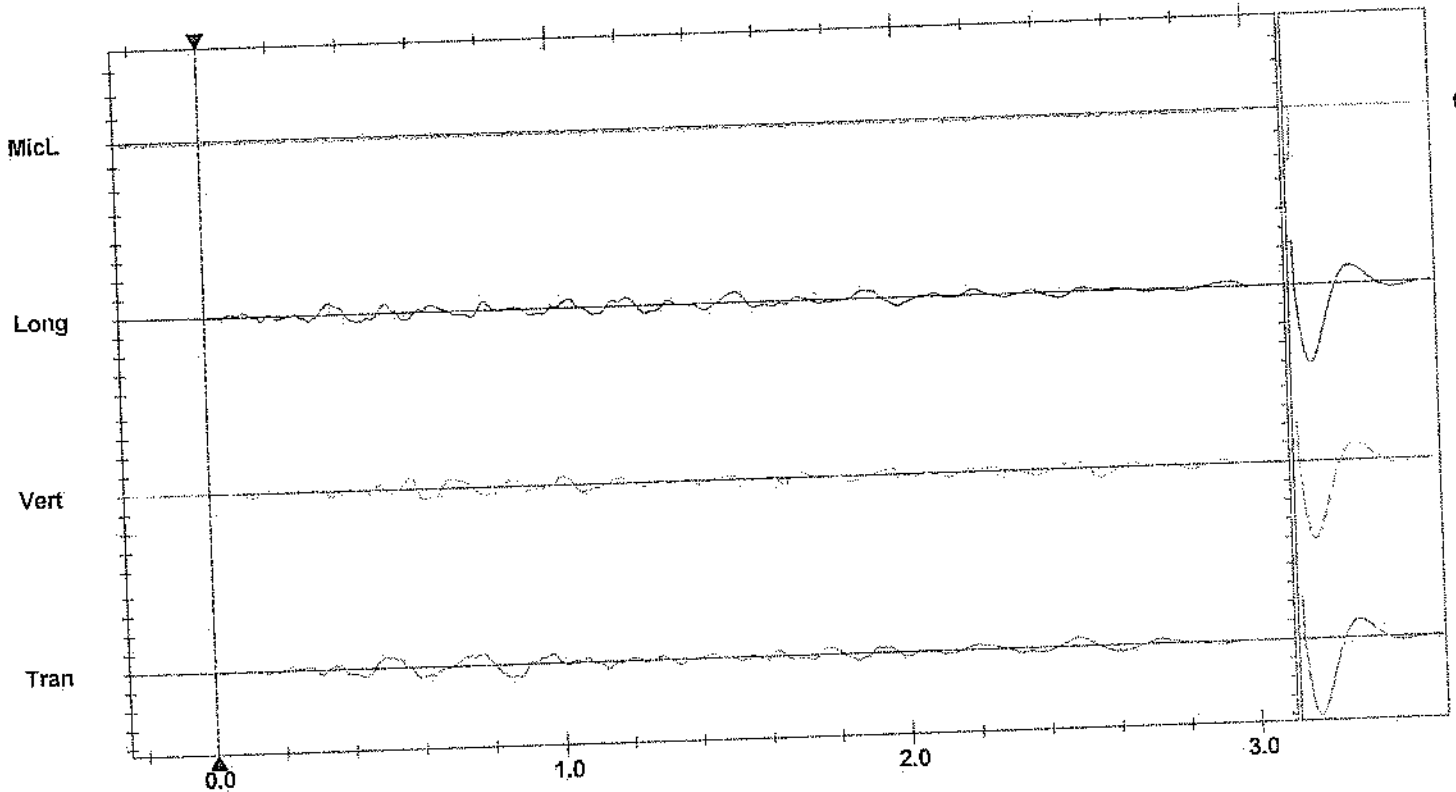
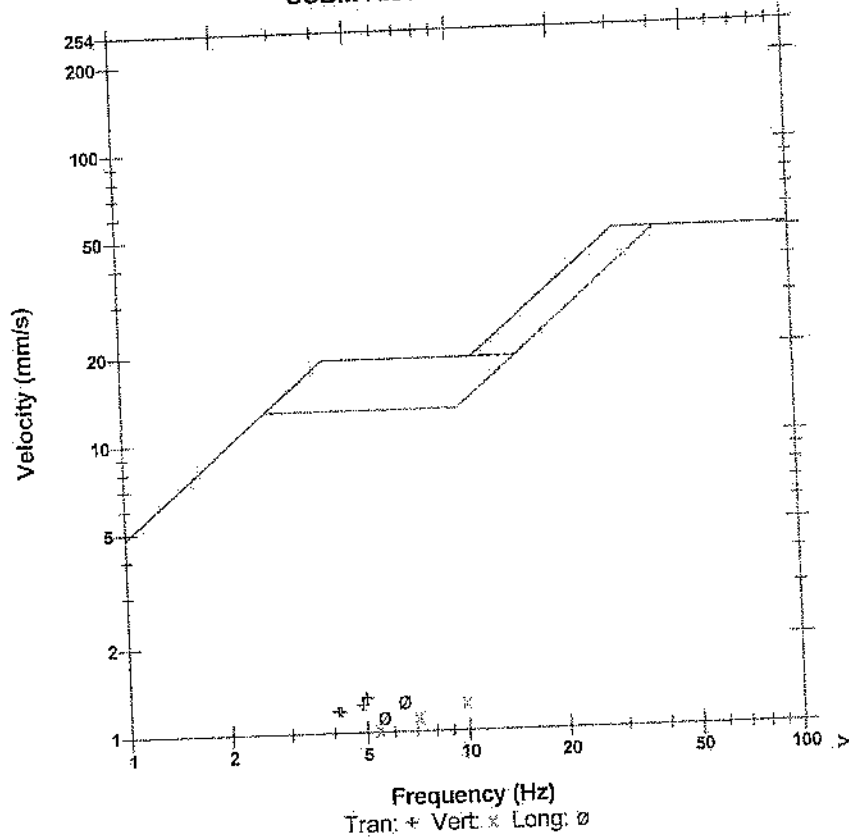
Notes
 Location:
 Client:
 User Name:
 General:

Microphone: Linear Weighting
 PSPL: <0.500 pa.(L)
 ZC Freq: N/A
 Channel Test: Check (Freq = 0.0 Hz Amp = 0 mv)

	Tran	Vert	Long	
PPV	1.308	1.245	1.269	mm/s
ZC Freq	5.0	9.8	6.5	Hz
Time (Rel. to Trig)	0.847	0.575	0.355	sec
Peak Acceleration	0.016	0.012	0.015	g
Peak Displacement	0.046	0.028	0.029	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.4	4.7	4.4	

Peak Vector Sum: 1.674 mm/s at 0.579 sec
 N/A: Not Applicable

USBM R18507 And OSMRE



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = \blacktriangleleft

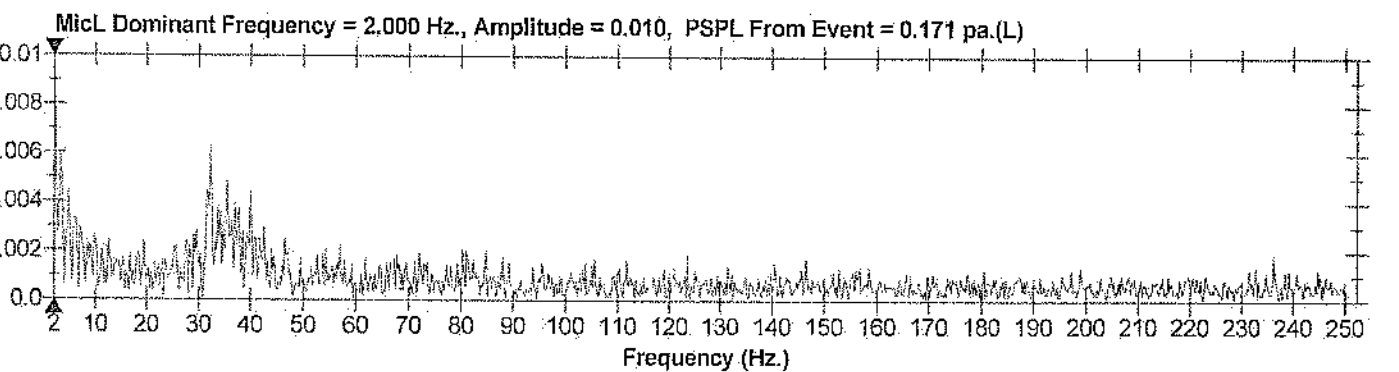
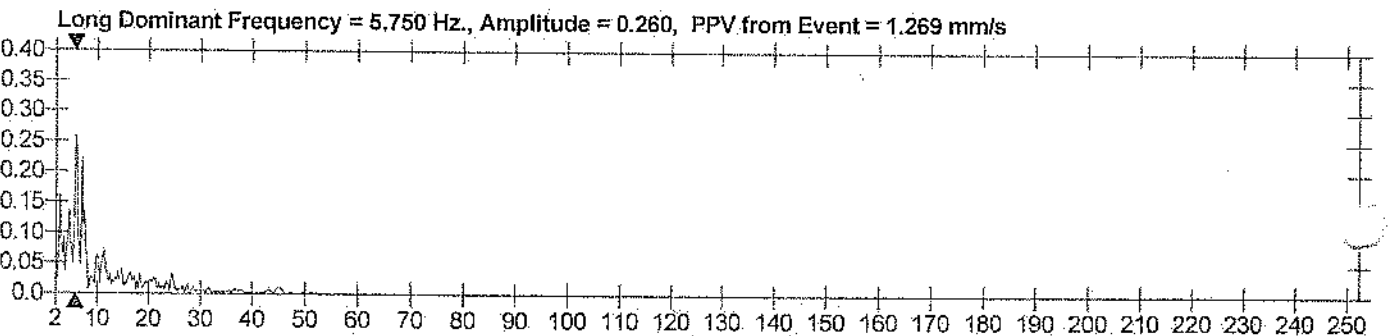
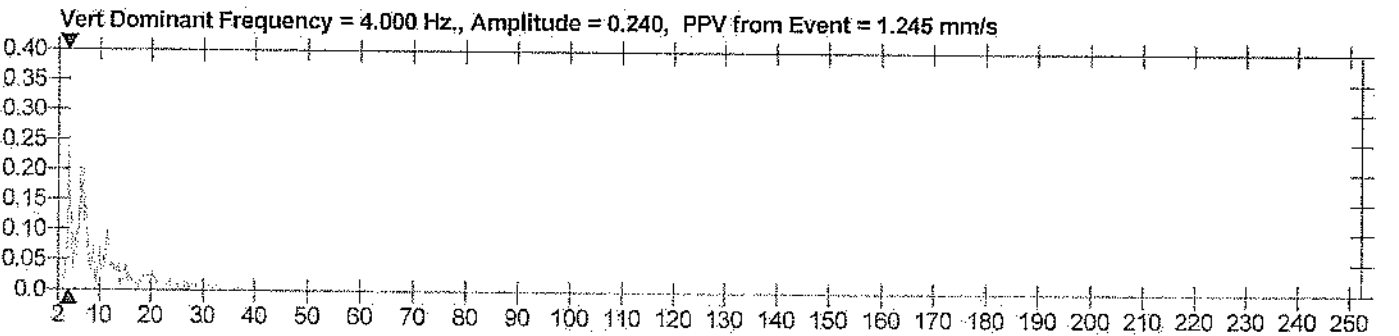
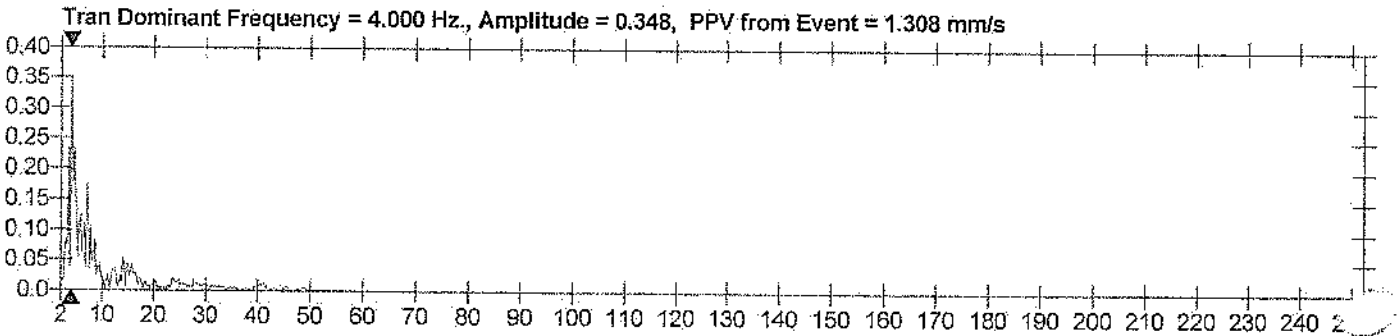
Sensor Check

Date/Time Long at 13:42:35 October 7, 2025
Trigger Source Geo: 0.127 mm/s, Mic: 2.000 pa.(L)
Range Geo: 254.0 mm/s
Record Time 3.0 sec at 1024 sps
Operator/Setup: Operator/factory.MMB

Serial Number UM23076 V 10-90FB Micromate ISEE
Battery Level 3.8 Volts
Unit Calibration February 4, 2025 by UES New Delhi
File Name __TEMP.EVT

Notes

Location:
Client:
User Name:
General:



Date/Time: Tran at 13:43:32 October 25, 2025
 Trigger Source: Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range: Geo: 254.0 mm/s
 Record Time: 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extended notes .MMB

Serial Number: UM20055 V 10-90GC Micromate ISEE
 Battery Level: 3.6 Volts
 Unit Calibration: February 20, 2025 by UES New Delhi
 File Name: UM20055_20251025134332.IDFW

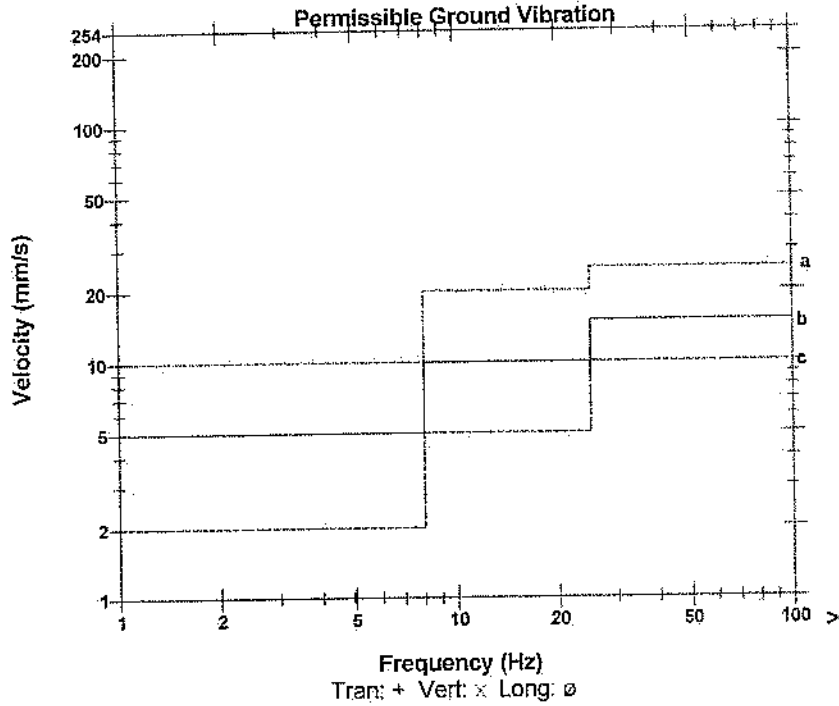
Notes
 Location: RL - 648, PIT - 4, KTM
 Client: TATA STEEL LTD.
 User Name: IDL EXPLOSIVE LTD
 General: KATAMATI IRON MINES

Microphone: Linear Weighting
 PSPL: <0.500 pa.(L)
 ZC Freq: 15.3 Hz
 Channel Test: Check (Freq = 0.0 Hz Amp = 0 mv.)

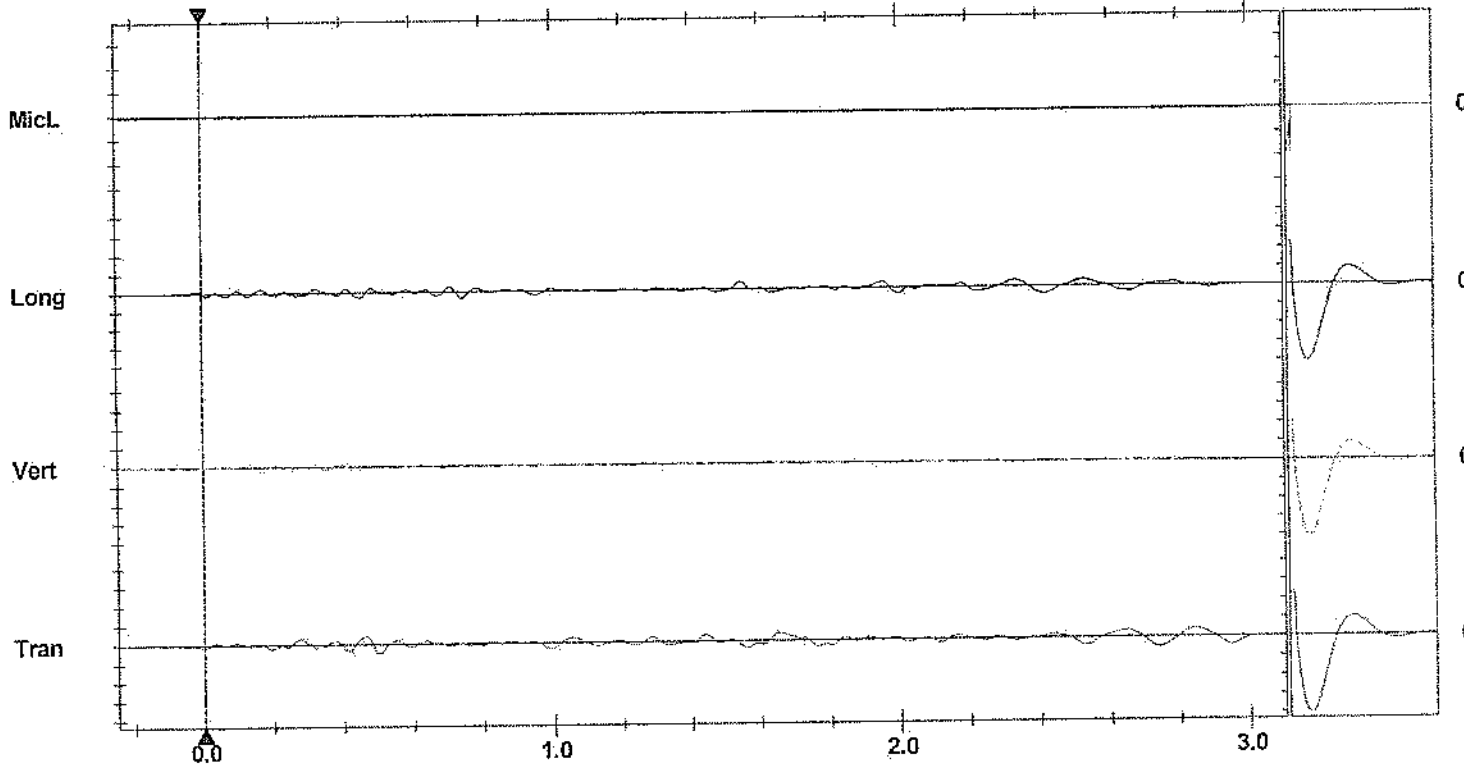
	Tran	Vert	Long	
PPV	1.001	0.512	0.835	mm/s
ZC Freq	4.9	12.6	5.3	Hz
Time (Rel. to Trig)	2.732	0.175	2.418	sec
Peak Acceleration	0.016	0.010	0.015	g
Peak Displacement	0.030	0.007	0.024	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.1	4.6	4.5	

Peak Vector Sum: 1.039 mm/s at 2.528 sec
 N/A: Not Applicable

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger =

Sensor Check

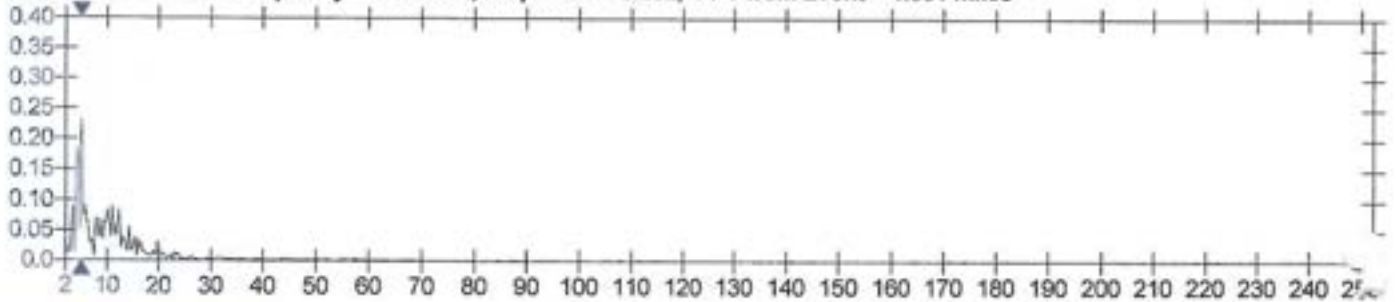
Date/Time Tran at 13:43:32 October 25, 2025
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
 Battery Level 3.6 Volts
 Unit Calibration February 20, 2025 by UES New Delhi
 File Name UM20055_20251025134332.IDFW

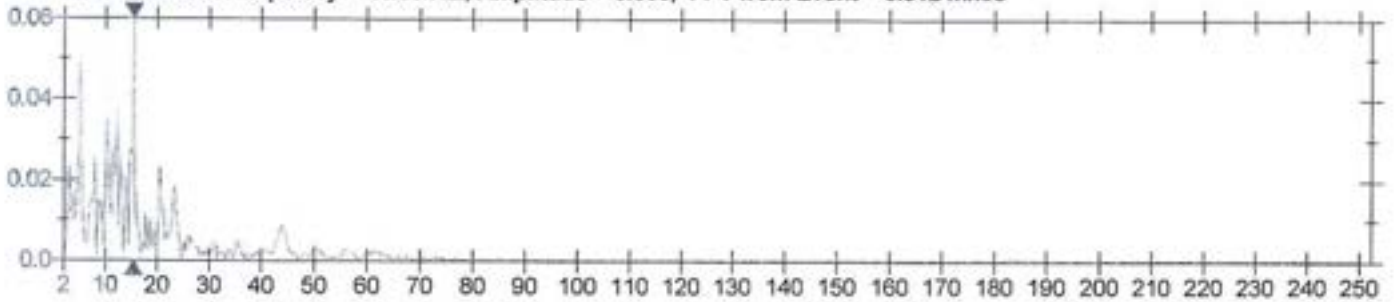
Notes

Location: RL - 648, PIT - 4, KTM
 Client: TATA STEEL LTD.
 User Name: IDL EXPLOSIVE LTD
 General: KATAMATI IRON MINES

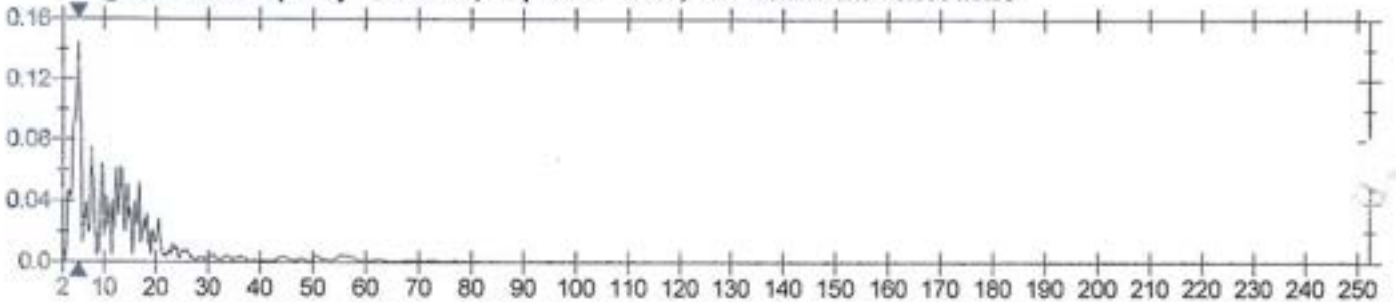
Tran Dominant Frequency = 5.000 Hz., Amplitude = 0.232, PPV from Event = 1.001 mm/s



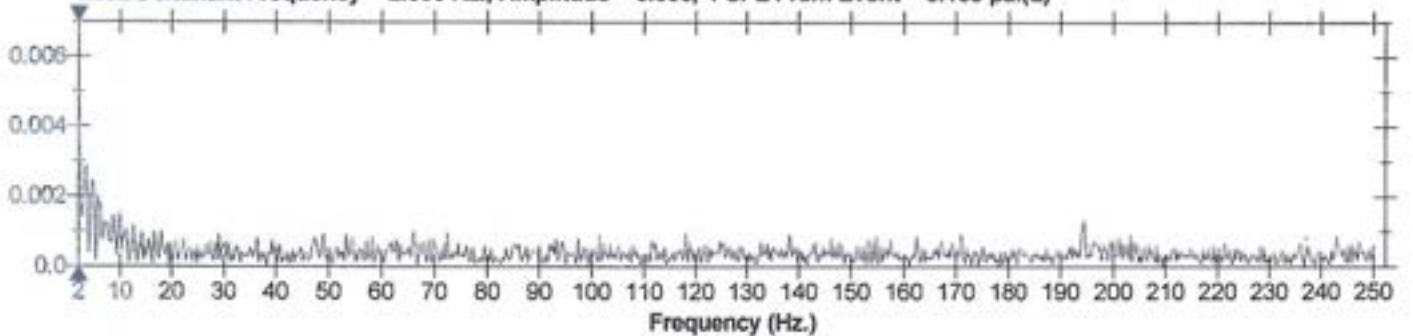
Vert Dominant Frequency = 15.50 Hz., Amplitude = 0.060, PPV from Event = 0.512 mm/s



Long Dominant Frequency = 5.000 Hz., Amplitude = 0.145, PPV from Event = 0.835 mm/s



MicL Dominant Frequency = 2.000 Hz., Amplitude = 0.006, PSPL From Event = 0.109 pa.(L)



Date/Time Tran at 13:41:48 October 28, 2025
 Trigger Source Geo: 0.300 mm/s
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/ Extended notes.MMB

Serial Number UM6253 V 10-76 Micromate ISEE
 Battery Level 3.5 Volts
 Unit Calibration February 20, 2025 by UES New Delhi
 File Name UM6253_20251028134148.IDFW

Notes

Location: RL - 690, PIT - 1, KTM
 Client: TATA STEEL LTD.
 User Name: IDL EXPLOSIVES LTD
 General: KATAMATI IRON MINES

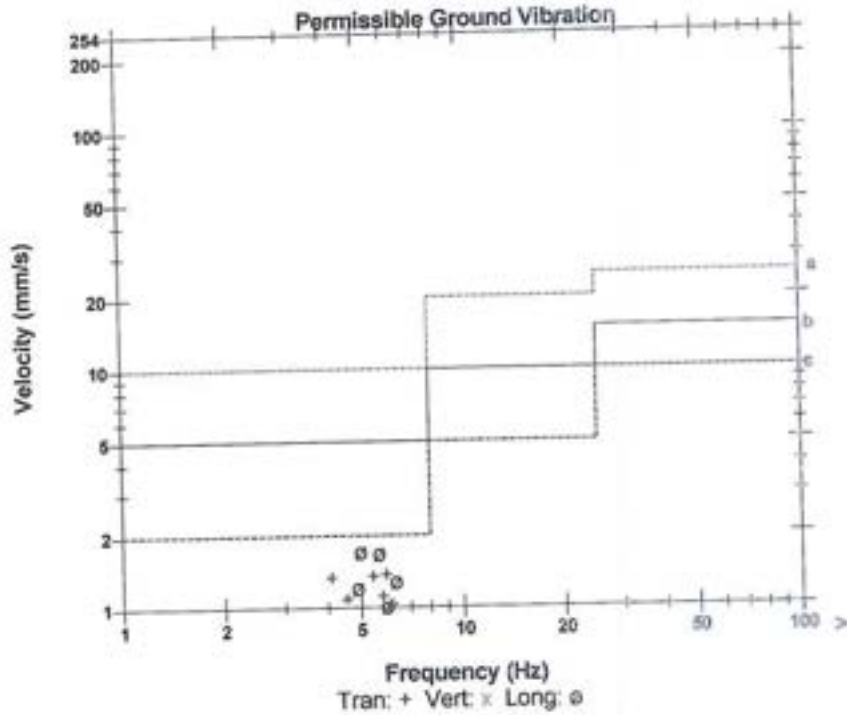
Extended Notes

Recorded at 230 mtr of the blasting face

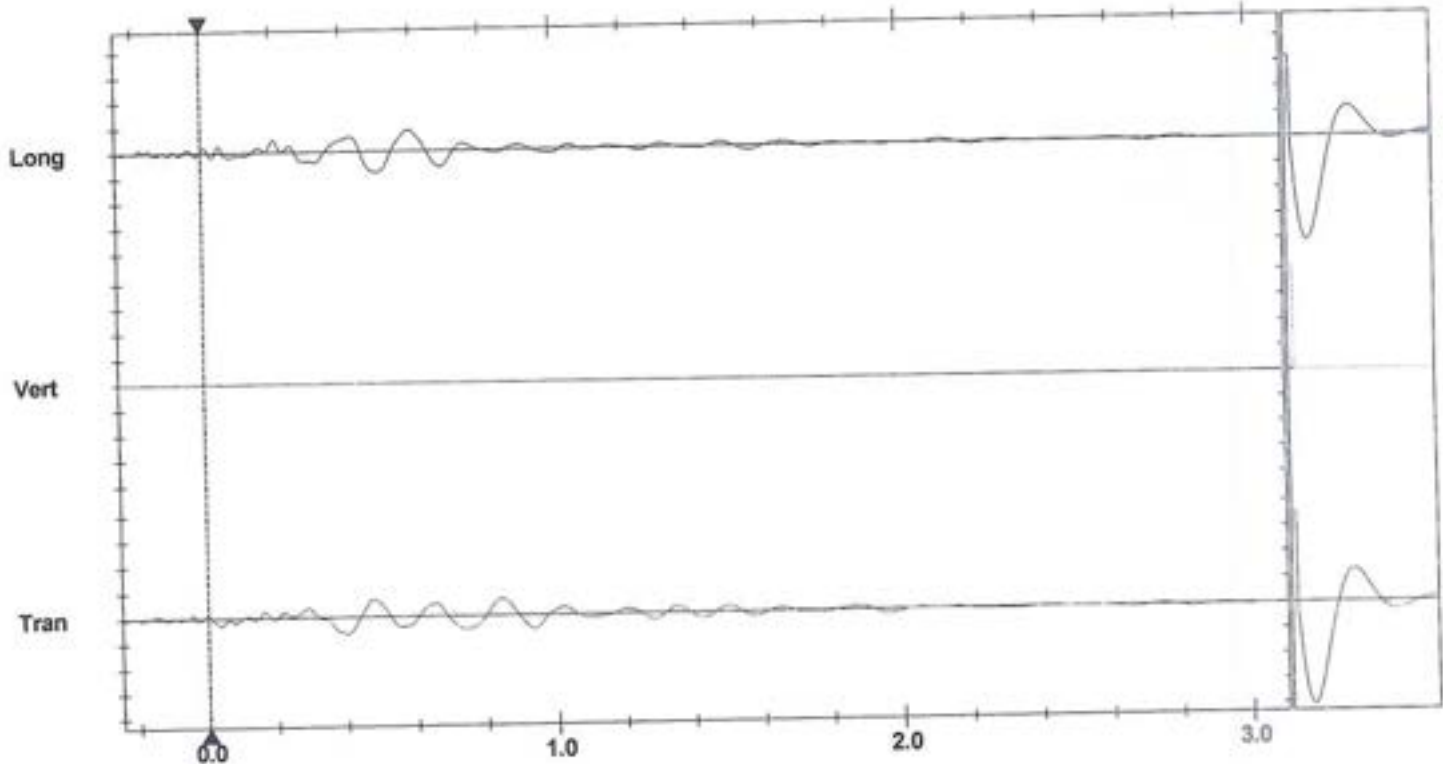
	Tran	Vert	Long	
PPV	1.371	0.047	1.710	mm/s
ZC Freq	5.9	49	5.0	Hz
Time (Rel. to Trig)	0.477	0.282	0.595	sec
Peak Acceleration	0.013	0.008	0.013	g
Peak Displacement	0.043	0.000	0.052	mm
Sensor Check	Passed	Check	Passed	
Frequency	7.3	1024.0	7.3	Hz
Overswing Ratio	3.3	0.0	3.6	

Peak Vector Sum 1.993 mm/s at 0.487 sec

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div
 Trigger = \blacktriangleleft \blacktriangleright

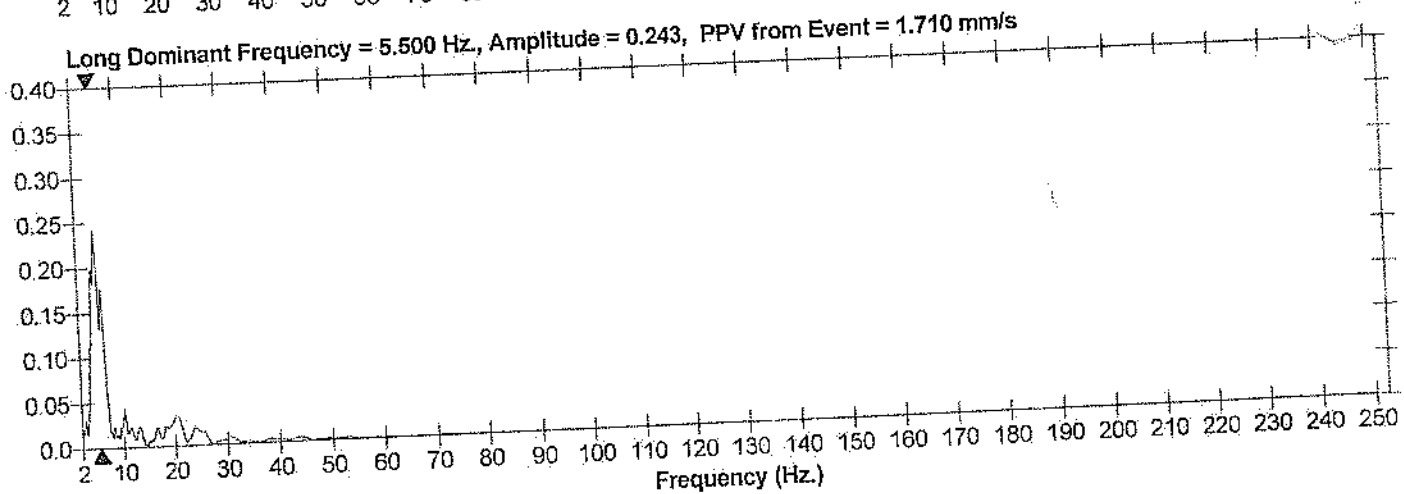
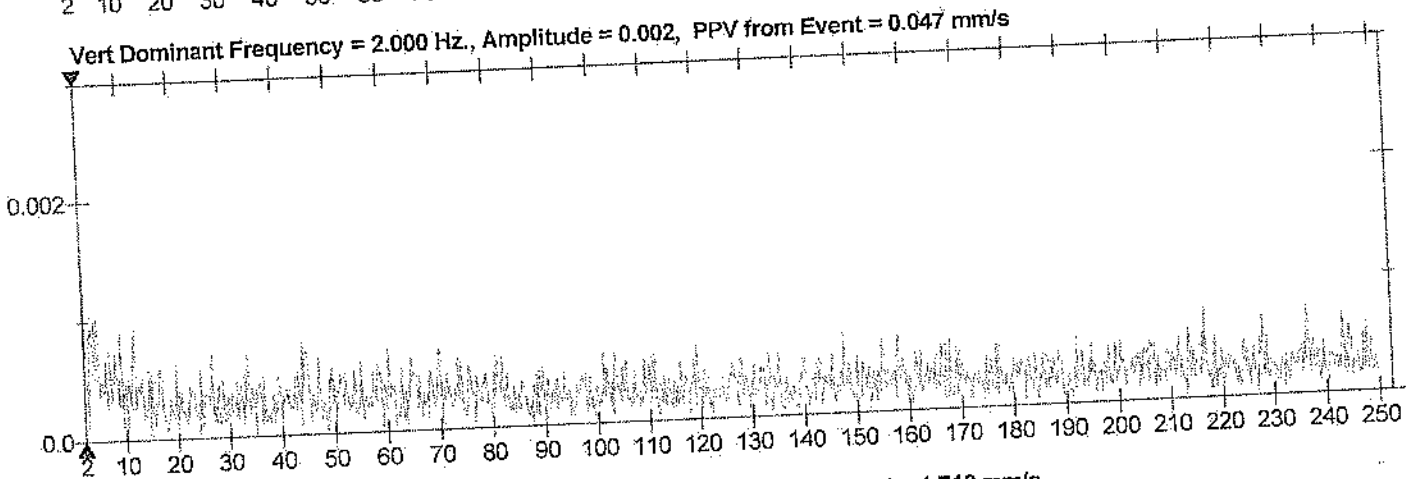
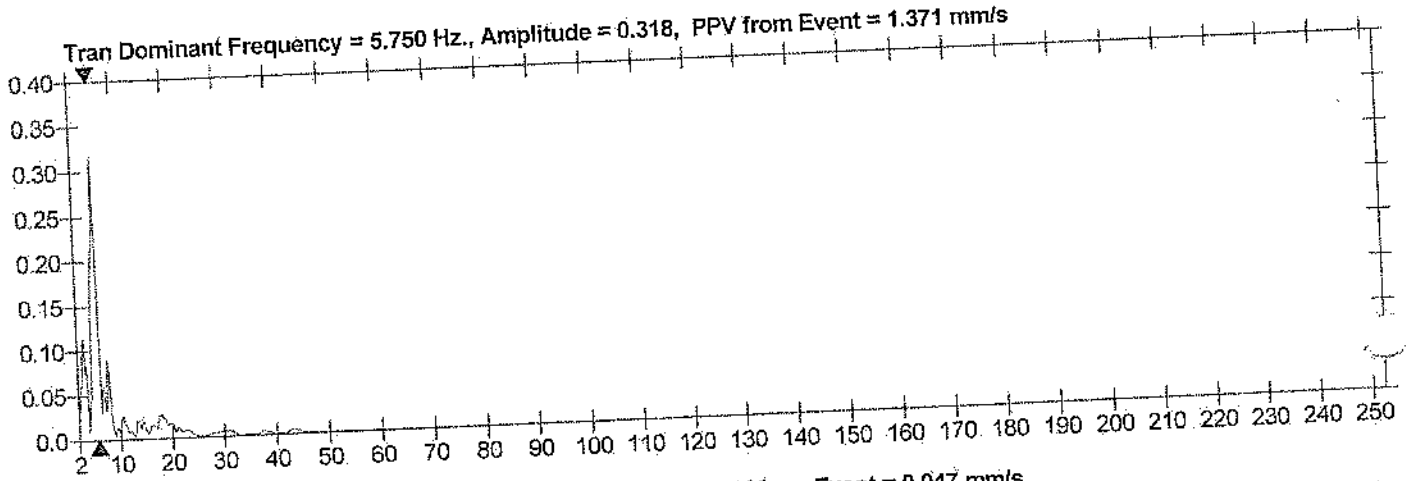
Sensor Check

Date/Time: Tran at 13:41:48 October 28, 2025
Trigger Source: Geo: 0.300 mm/s
Range: Geo: 254.0 mm/s
Record Time: 3.0 sec at 2048 sps
Operator/Setup: Operator/ Extended notes.MMB

Serial Number: UM6253 V 10-76 Micromate ISEE
Battery Level: 3.5 Volts
Unit Calibration: February 20, 2025 by UES New Delhi
File Name: UM6253_20251028134148.IDFW

Notes
Location: RL - 690, PIT - 1, KTM
Client: TATA STEEL LTD.
User Name: IDL EXPLOSIVES LTD
General: KATAMATI IRON MINES

Extended Notes
Recorded at 230 mtr of the blasting face



Date/Time Long at 14:28:33 November 12, 2025
 Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 4096 sps
 Operator/Setup: Operator/factory.MMB

Serial Number UM21106-V 10-90GC Micromate ISEE
 Battery Level 3.8 Volts
 Unit Calibration October 8, 2025 by UES New Delhi
 File Name __TEMP.EVT

Notes

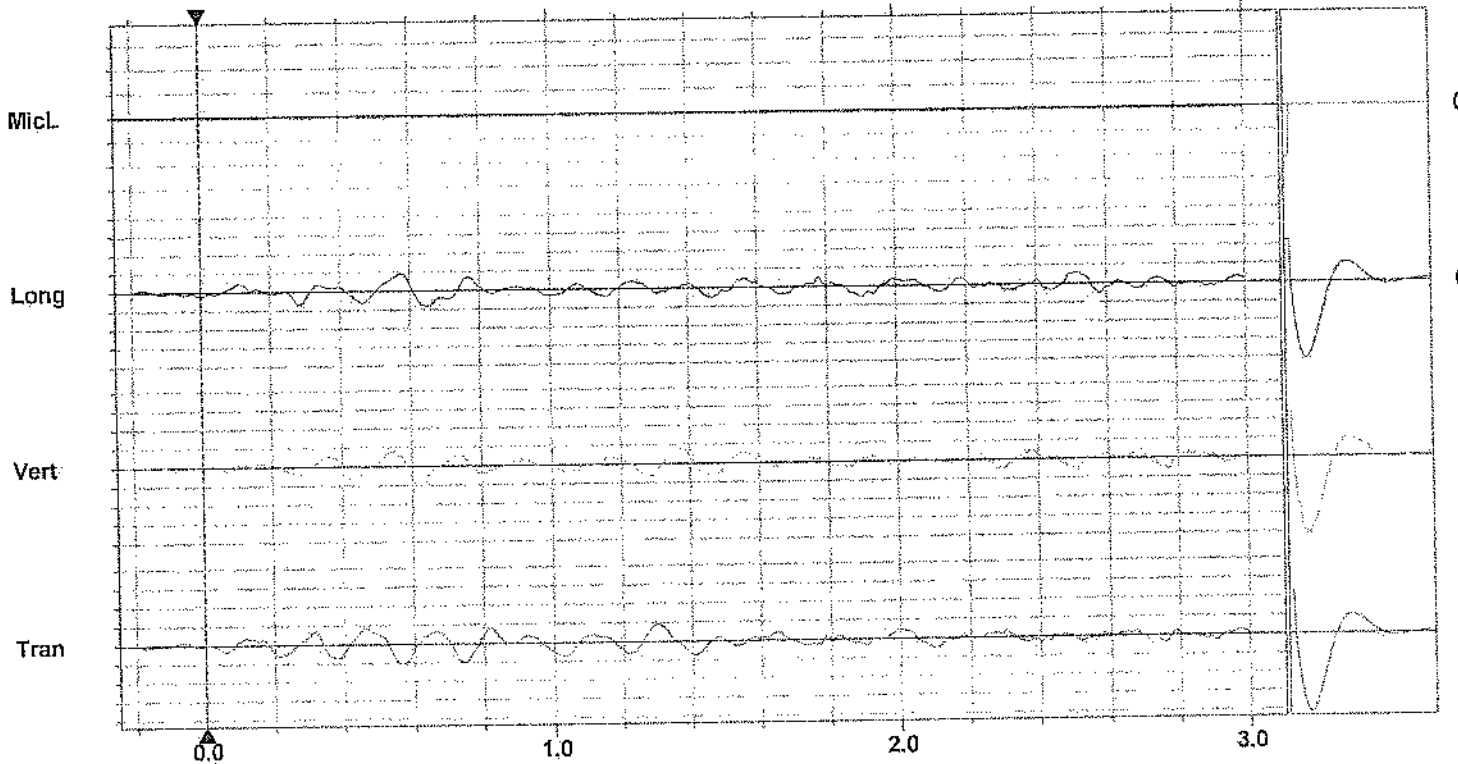
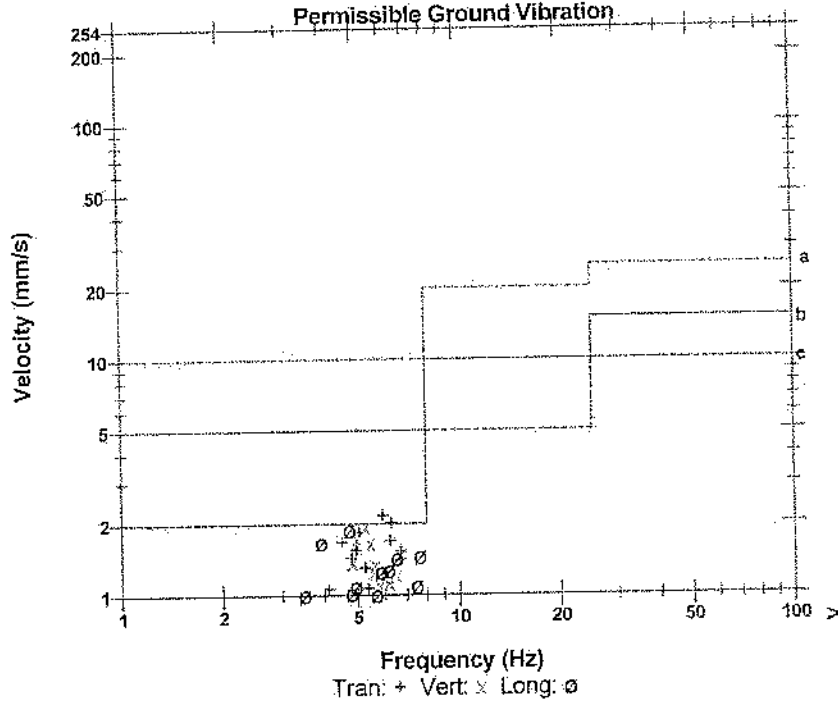
Location:
 Client:
 User Name:
 General:

Microphone Linear Weighting
 PSPL <88 dB(L)
 ZC Freq <1.0 Hz
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

	Tran	Vert	Long	
PPV	2.160	1.947	1.884	mm/s
ZC Freq	6.0	5.3	4.7	Hz
Time (Rel. to Trig)	0.572	0.618	0.573	sec
Peak Acceleration	0.026	0.023	0.023	g
Peak Displacement	0.057	0.050	0.062	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	4.1	4.0	4.0	

Peak Vector Sum 3.000 mm/s at 0.571 sec
 N/A: Not Applicable

DGMS India (A)



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = \blacktriangleleft \blacktriangleright

Sensor Check

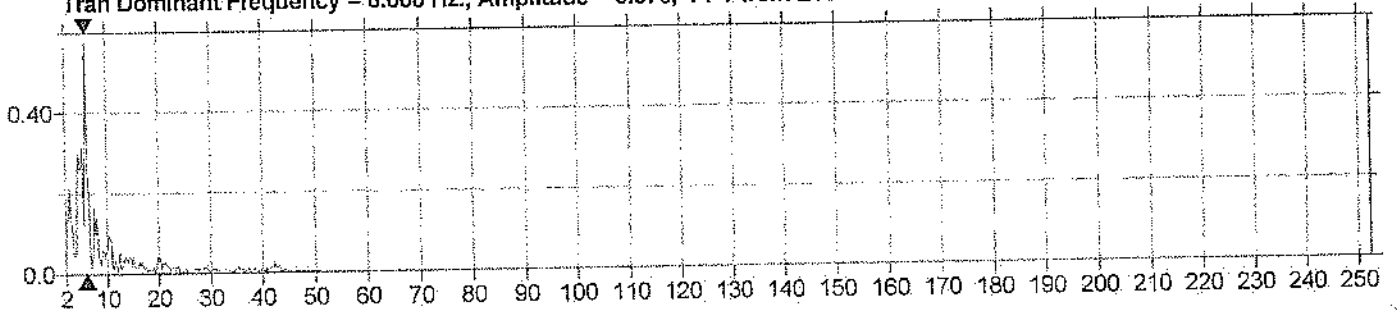
Date/Time Long at 14:28:33 November 12, 2025
Trigger Source Geo: 0.500 mm/s, Mic: 100.00 dB(L)
Range Geo: 254.0 mm/s
Record Time 3.0 sec at 4096 sps
Operator/Setup: Operator/factory,MMB

Serial Number UM21106 V 10-90GC Micromate ISEE
Battery Level 3.8 Volts
Unit Calibration October 8, 2025 by UES New Delhi
File Name __TEMP.EVT

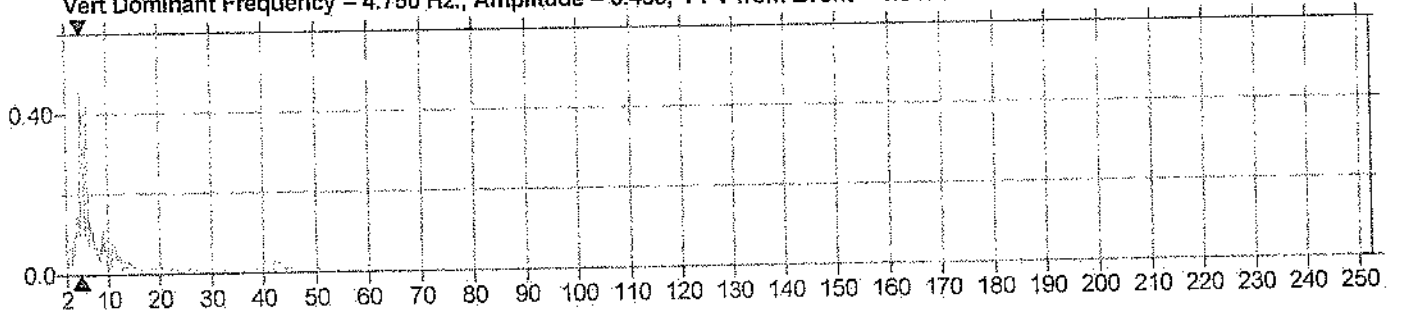
Notes

Location:
Client:
User Name:
General:

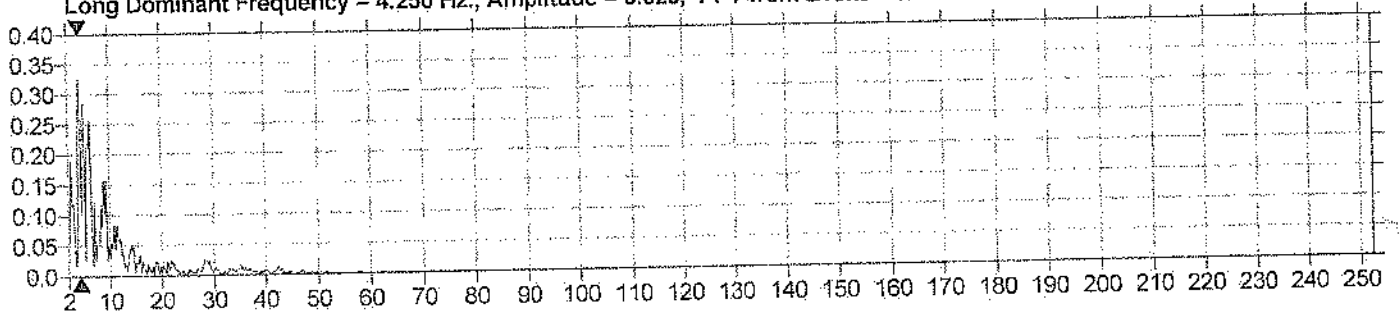
Tran Dominant Frequency = 6.000 Hz., Amplitude = 0.576, PPV from Event = 2.160 mm/s



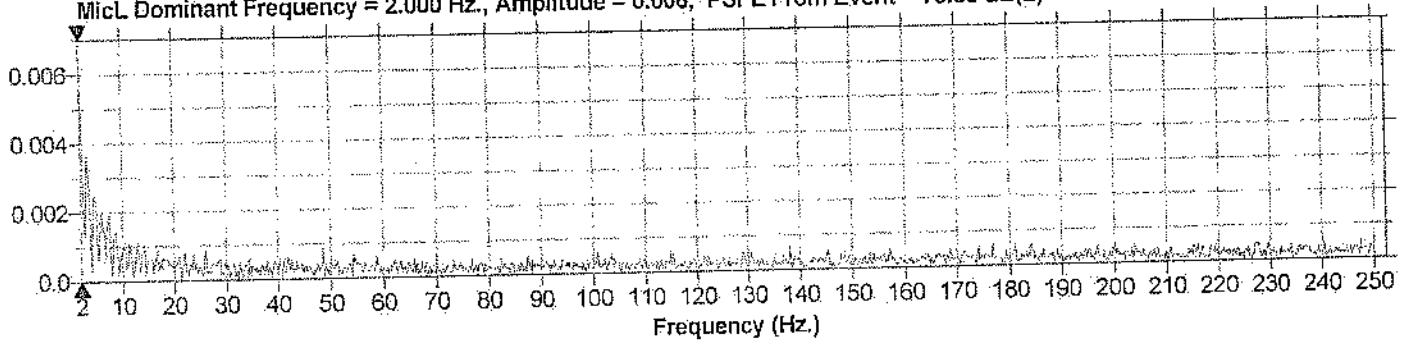
Vert Dominant Frequency = 4.750 Hz., Amplitude = 0.458, PPV from Event = 1.947 mm/s



Long Dominant Frequency = 4.250 Hz., Amplitude = 0.329, PPV from Event = 1.884 mm/s



MicL Dominant Frequency = 2.000 Hz., Amplitude = 0.006, PSPL From Event = 75.86 dB(L)



Date/Time Vert at 13:50:40 November 14, 2025
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 4096 sps
 Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromale ISEE
 Battery Level 3.8 Volts
 Unit Calibration February 20, 2025 by UES New Delhi
 File Name UM20055_20251114135040.IDFW

Notes

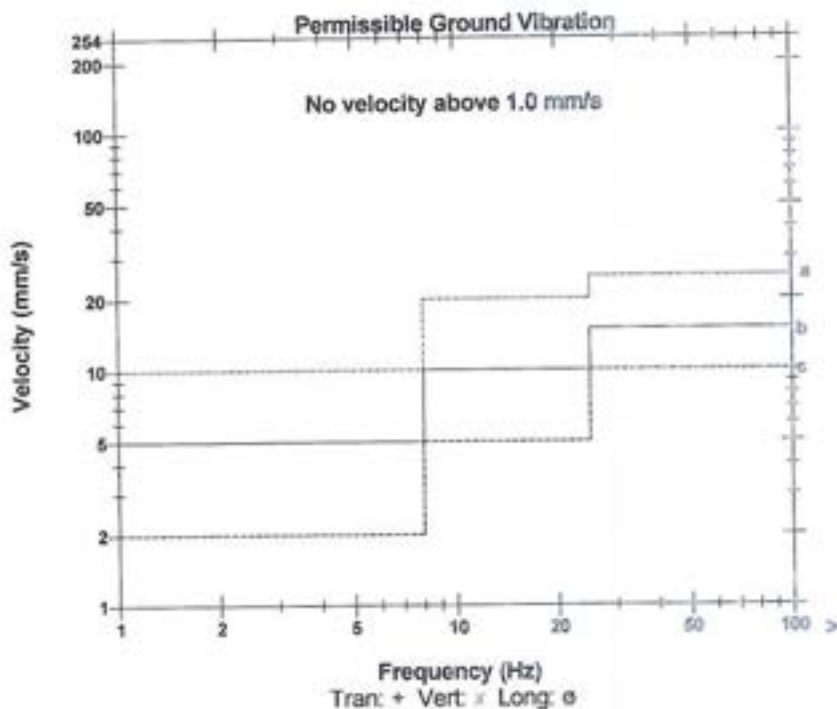
Location: KTM MINES
 Client: TATA STEEL LTD.
 User Name: IDL EXPLOSIVE LTD
 General: PIT -1 , RL- 678, & RL- 686

Microphone Linear Weighting
 PSPL <0.500 pa.(L)
 ZC Freq 171 Hz
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

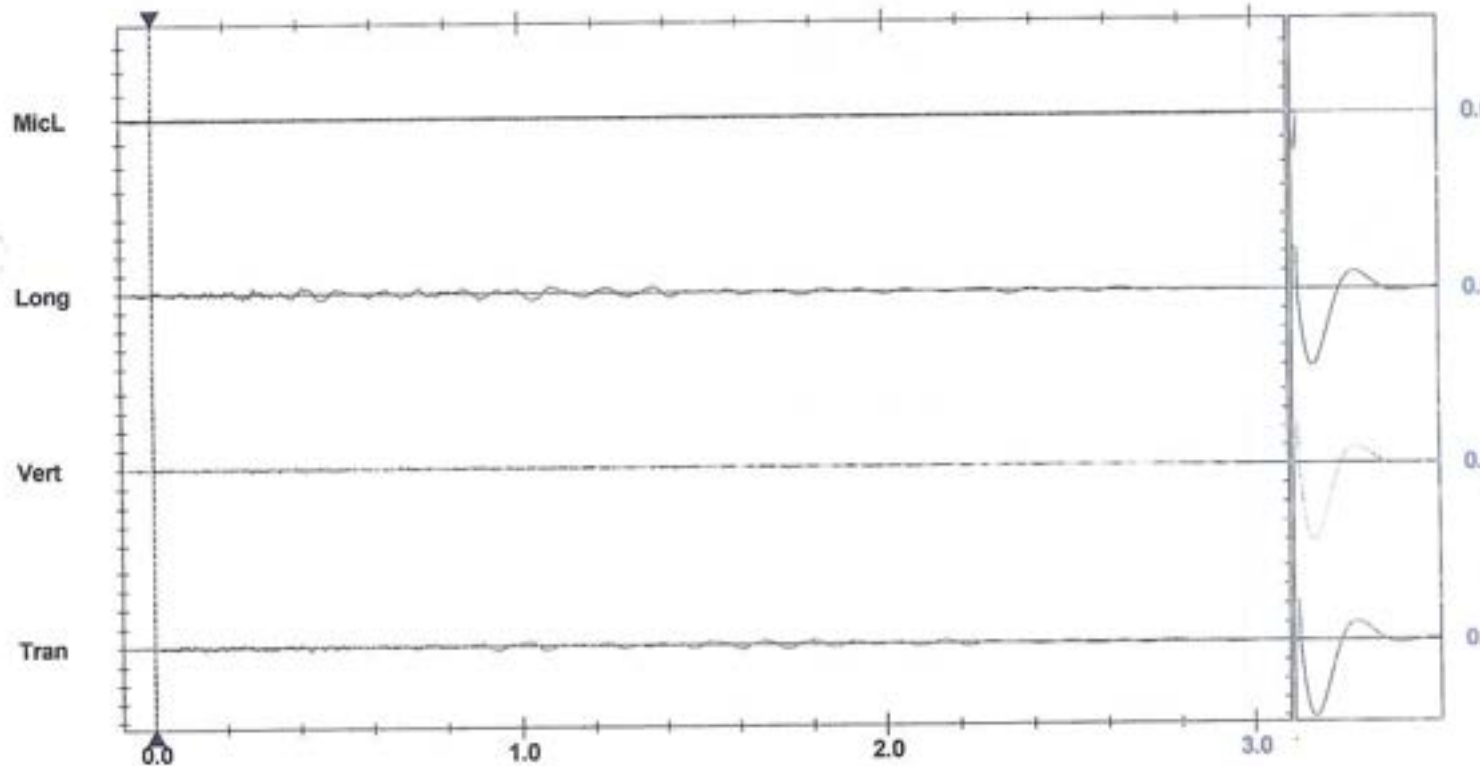
	Tran	Vert	Long	
PPV	0.520	0.520	0.741	mm/s
ZC Freq	9.6	14.1	8.8	Hz
Time (Rel. to Trig)	0.939	0.474	1.035	sec
Peak Acceleration	0.026	0.026	0.026	g
Peak Displacement	0.010	0.006	0.014	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.2	4.7	4.6	

Peak Vector Sum 0.816 mm/s at 1.031 sec
 N/A: Not Applicable

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = \blacktriangleleft

Sensor Check

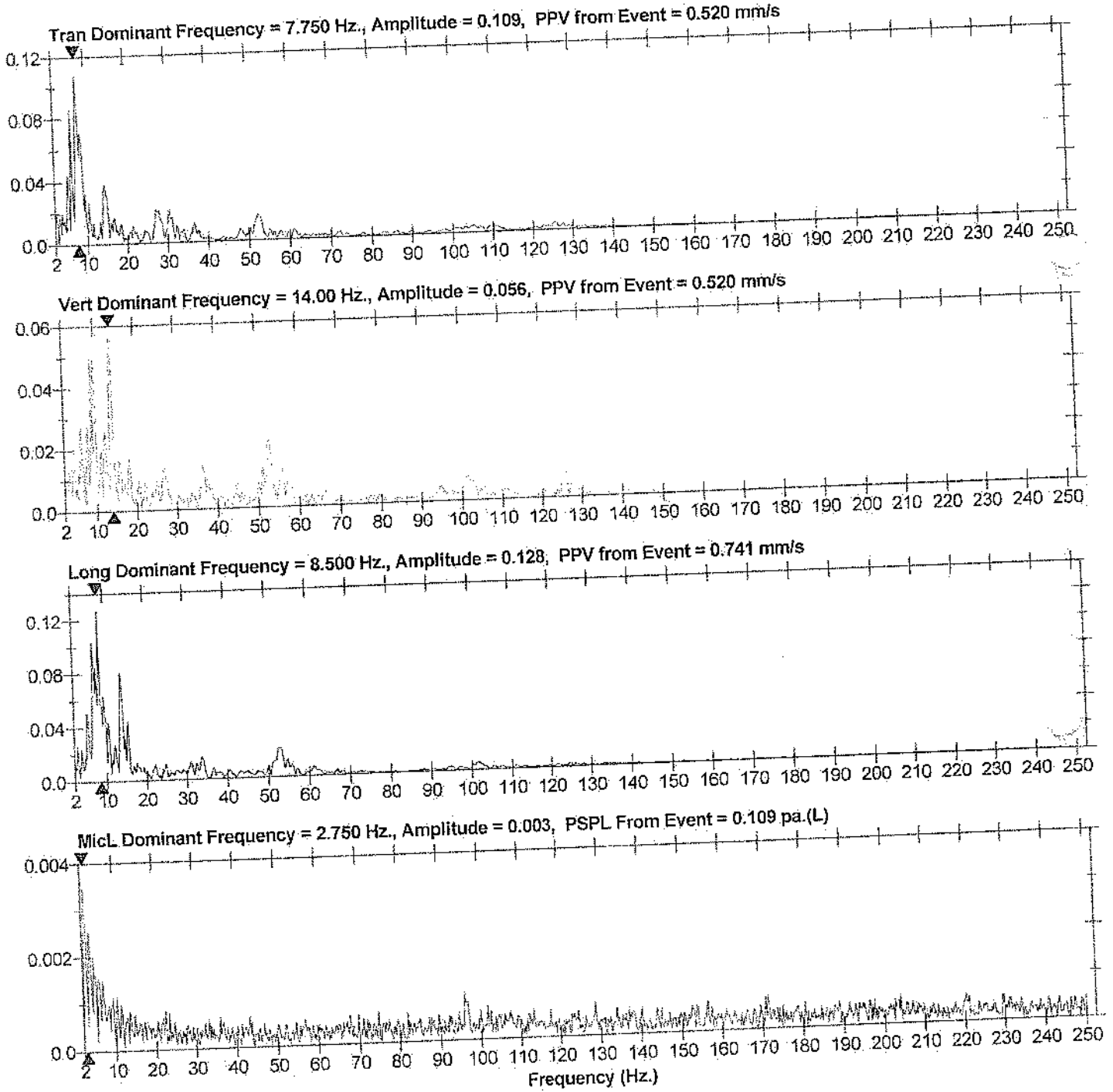
Handwritten signature/initials

Date/Time Vert at 13:50:40 November 14, 2025
Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
Range Geo: 254.0 mm/s
Record Time 3.0 sec at 4096 sps
Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
Battery Level 3.8 Volts
Unit Calibration February 20, 2025 by UES New Delhi
File Name UM20055_20251114135040.IDFW

Notes

Location: KTM MINES
Client: TATA STEEL LTD.
User Name: IDL EXPLOSIVE LTD
General: PIT -1 , RL- 678, & RL-666



Date/Time Tran at 13:35:51 December 24, 2025
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extendeded Note.MMB

Serial Number UM15576 V 10-90FB Micromate ISEE
 Battery Level 3.8 Volts
 Unit Calibration June 17, 2025 by UES New Delhi
 File Name UM15576_20251224133551.IDFW

Notes

Location: RL - 658, PIT - 4, KTM
 Client: TATA STEEL LTD.
 User Name: IDL EXPLOSIVE LTD.
 General: KATAMATI IRON MINES

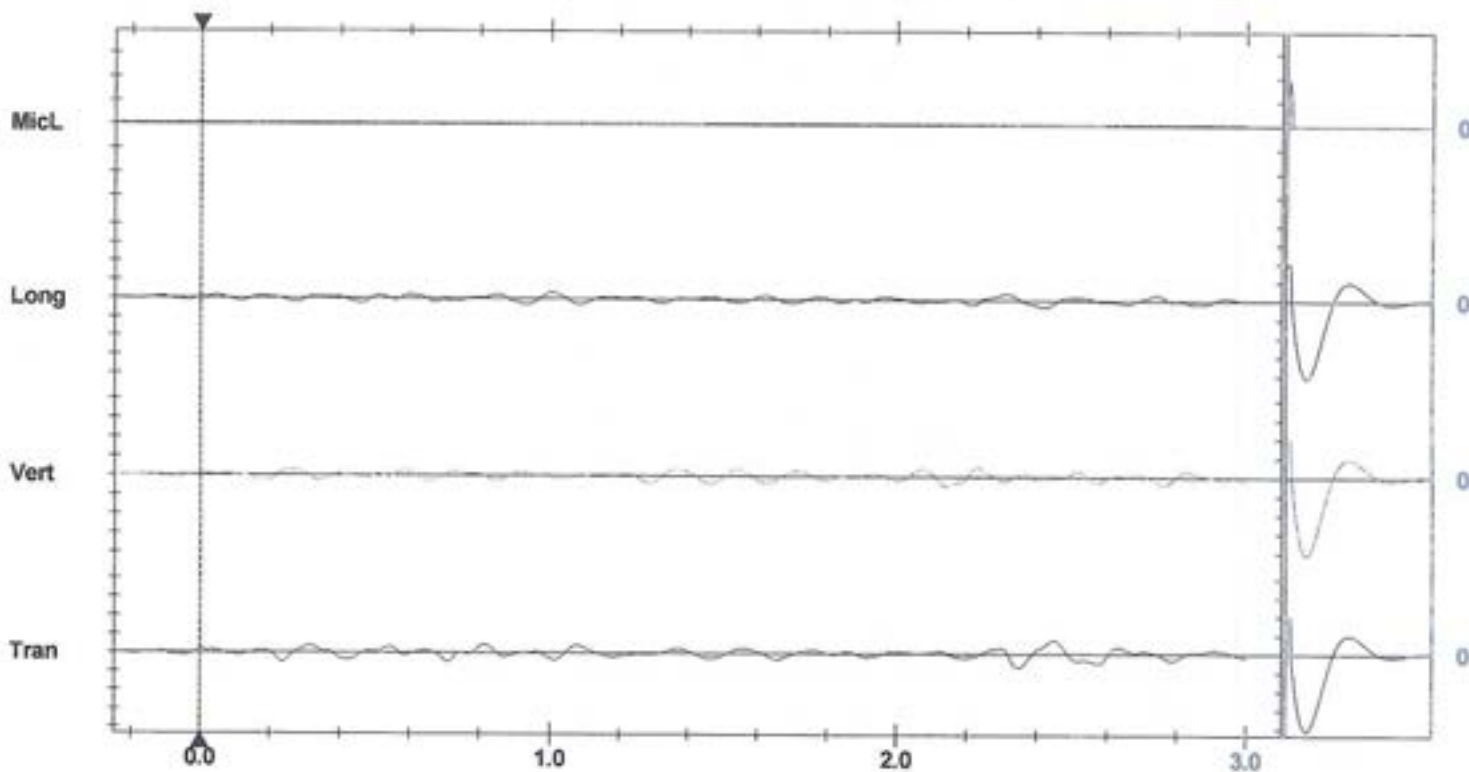
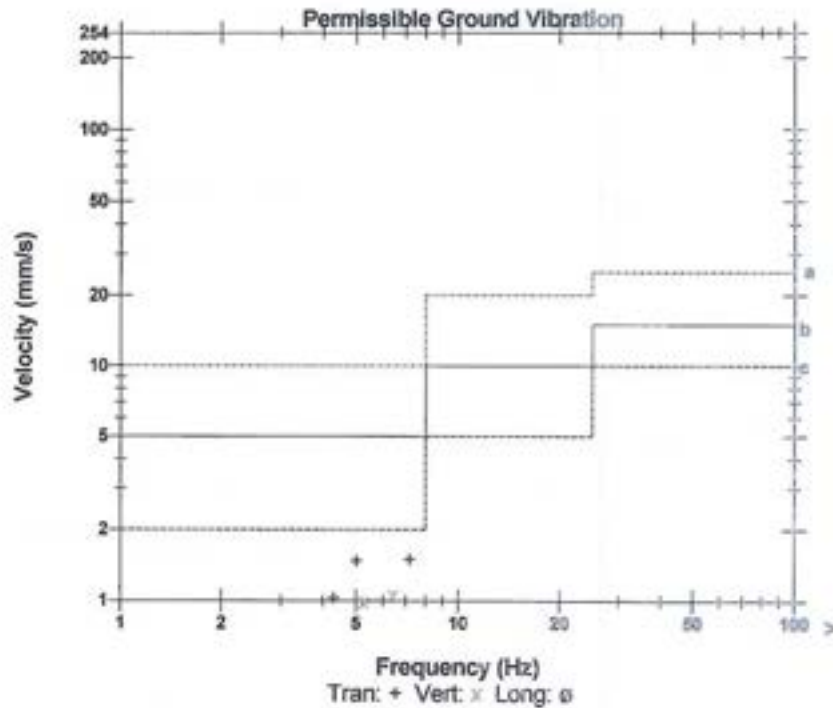
Extended Notes

Microphone Linear Weighting
 PSPL <0.500 pa.(L)
 ZC Freq 128 Hz
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

	Tran	Vert	Long	
PPV	1.490	1.064	0.717	mm/s
ZC Freq	7.2	6.4	4.7	Hz
Time (Rel. to Trig)	2.345	2.233	2.419	sec
Peak Acceleration	0.015	0.012	0.010	g
Peak Displacement	0.043	0.028	0.023	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.1	7.3	7.1	Hz
Overswing Ratio	4.1	4.2	4.1	

Peak Vector Sum 1.513 mm/s at 2.444 sec
 N/A: Not Applicable

DGMS India (A)



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger =

Sensor Check

Date/Time Tran at 13:35:51 December 24, 2025
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extendeded Note,MMB

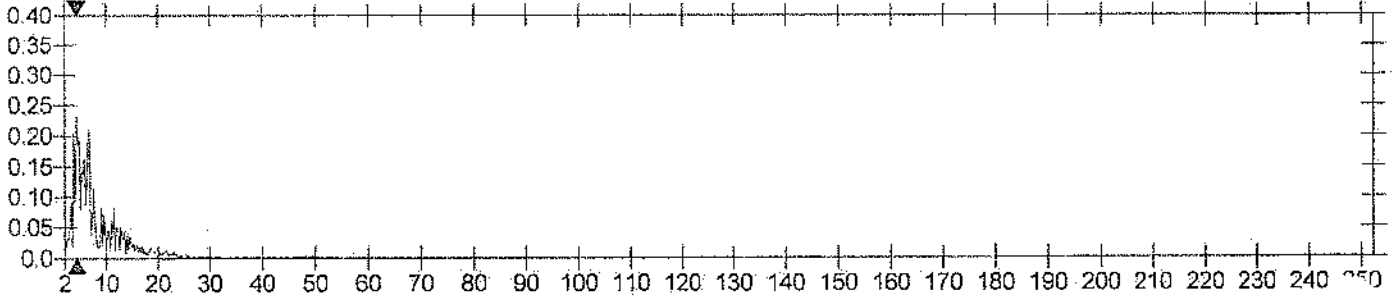
Serial Number UM15576 V 10-90FB Micromate.ISEE
 Battery Level 3.8 Volts
 Unit Calibration June 17, 2025 by UES New Delhi
 File Name UM15576_20251224133551.IDFW

Notes

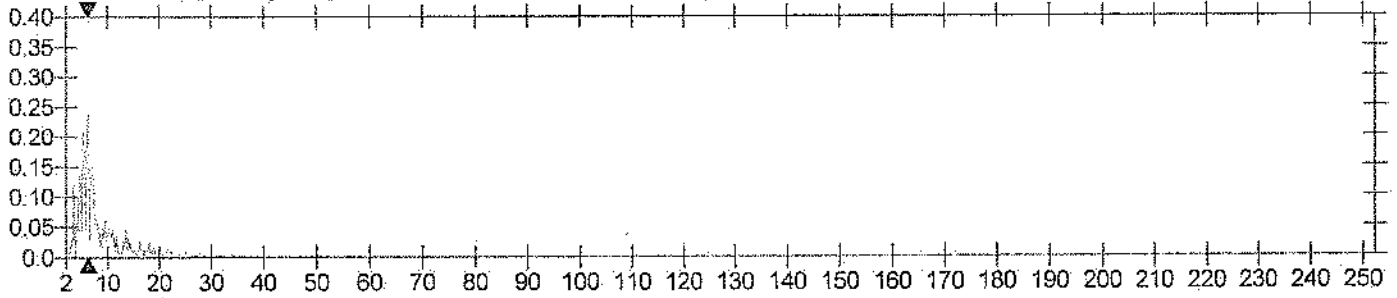
Location: RL - 658, PIT - 4, KTM
 Client: TATA STEEL LTD.
 User Name: IDL EXPLOSIVE LTD.
 General: KATAMATI IRON MINES

Extended Notes

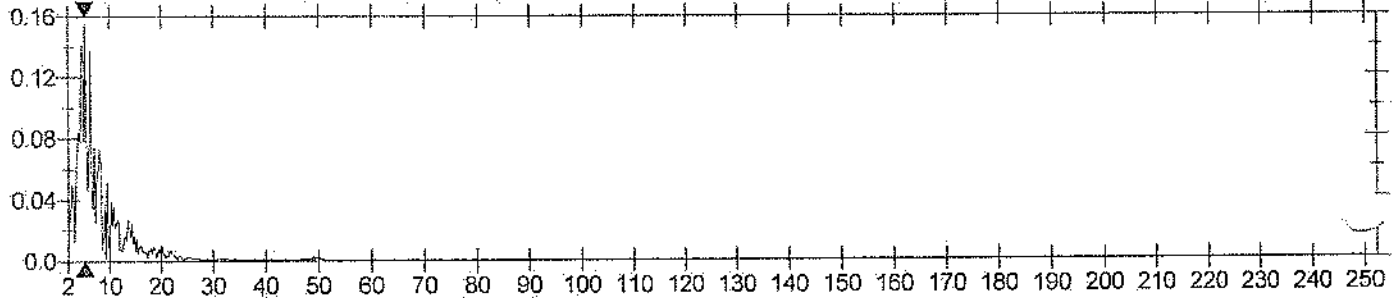
Tran Dominant Frequency = 4.250 Hz., Amplitude = 0.231, PPV from Event = 1.490 mm/s



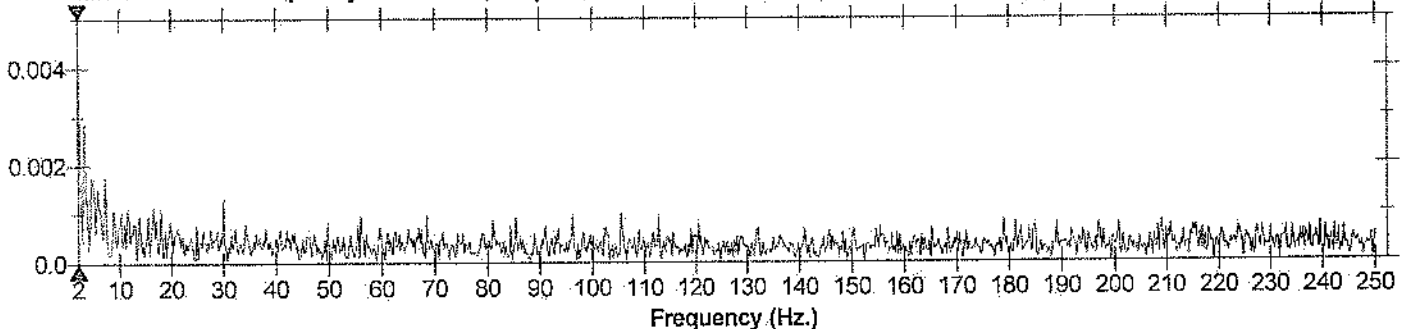
Vert Dominant Frequency = 6.250 Hz., Amplitude = 0.240, PPV from Event = 1.064 mm/s



Long Dominant Frequency = 5.250 Hz., Amplitude = 0.155, PPV from Event = 0.717 mm/s



MicL Dominant Frequency = 2.000 Hz., Amplitude = 0.005, PSPL From Event = 0.093 pa.(L)



Date/Time Tran at 13:58:32 December 25, 2025
 Trigger Source Geo: 0.500 mm/s
 Range Geo: 254.0 mm/s
 Record Time 6.0 sec at 1024 sps
 Operator/Setup: Operator/BDEPL.MMB

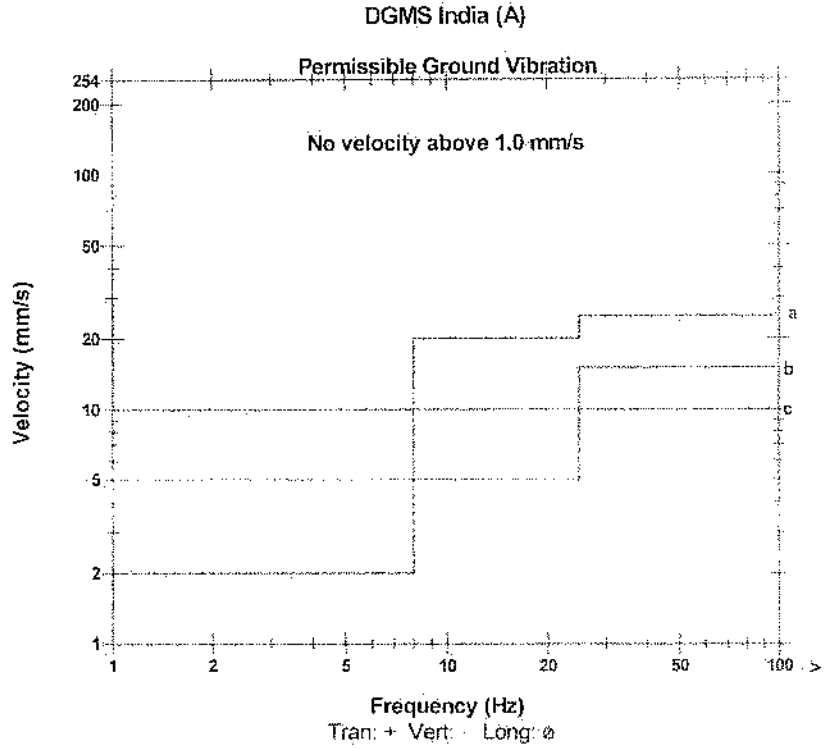
Serial Number UM19506 V 10-90GC Micromate ISEE
 Battery Level 3.7 Volts
 Unit Calibration October 13, 2025 by UES New Delhi
 File Name __TEMP.EVT

Notes
 Location: On Ground Surface
 Client: TSL
 User Name: BDEPL
 General: KATAMATI IRON MINES

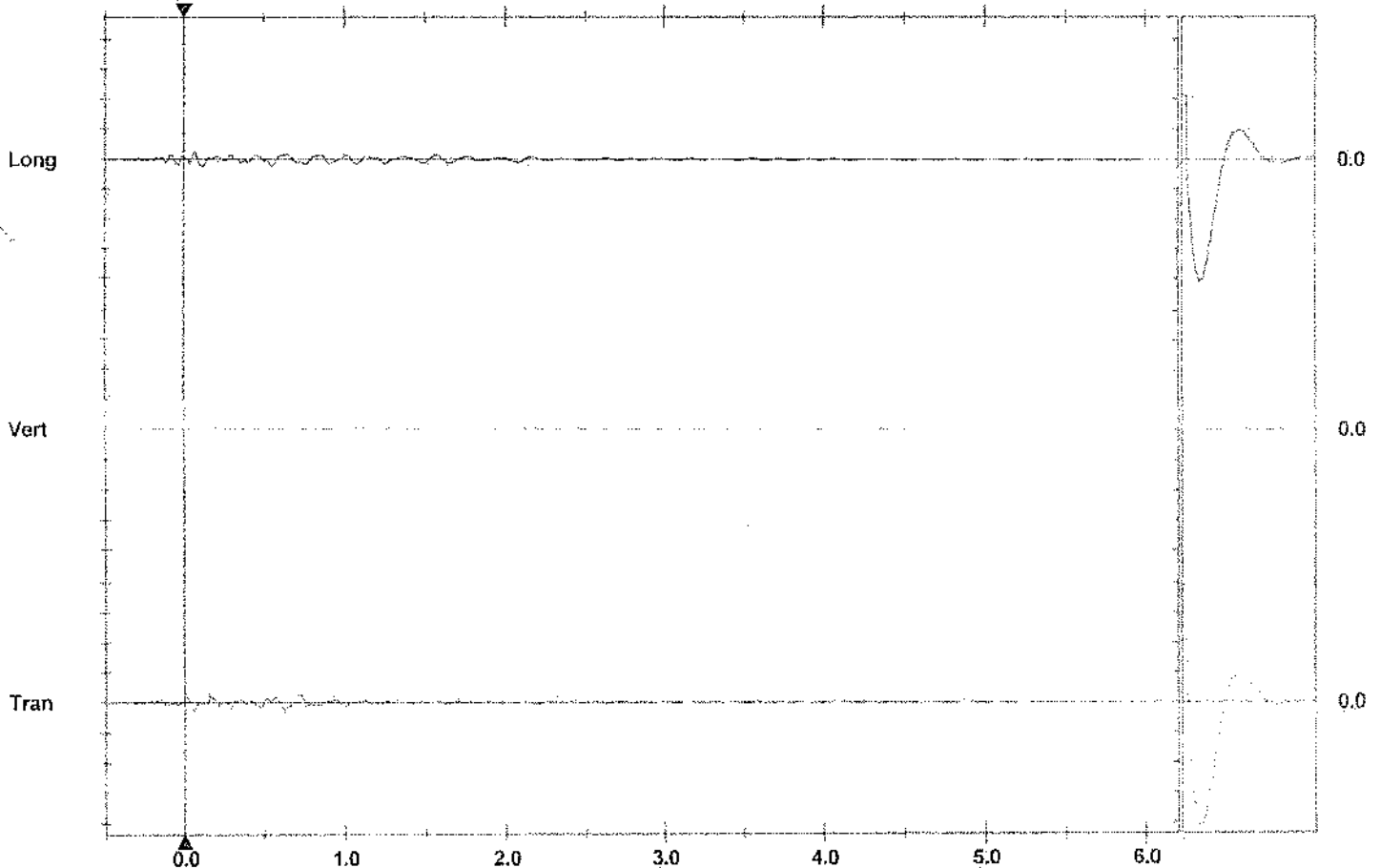
Extended Notes
 150 mtrs backside from blasting face

	Tran	Vert	Long	
PPV	0.631	0.386	0.567	mm/s
ZC Freq	9.8	9.1	9.1	Hz
Time (Rel. to Trig)	0.008	0.130	0.120	sec
Peak Acceleration	0.009	0.007	0.011	g
Peak Displacement	0.013	0.006	0.012	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.5	Hz
Overswing Ratio	4.3	3.7	4.2	

Peak Vector Sum 0.723 mm/s at 0.064 sec



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.000 mm/s/div
 Trigger = <--->

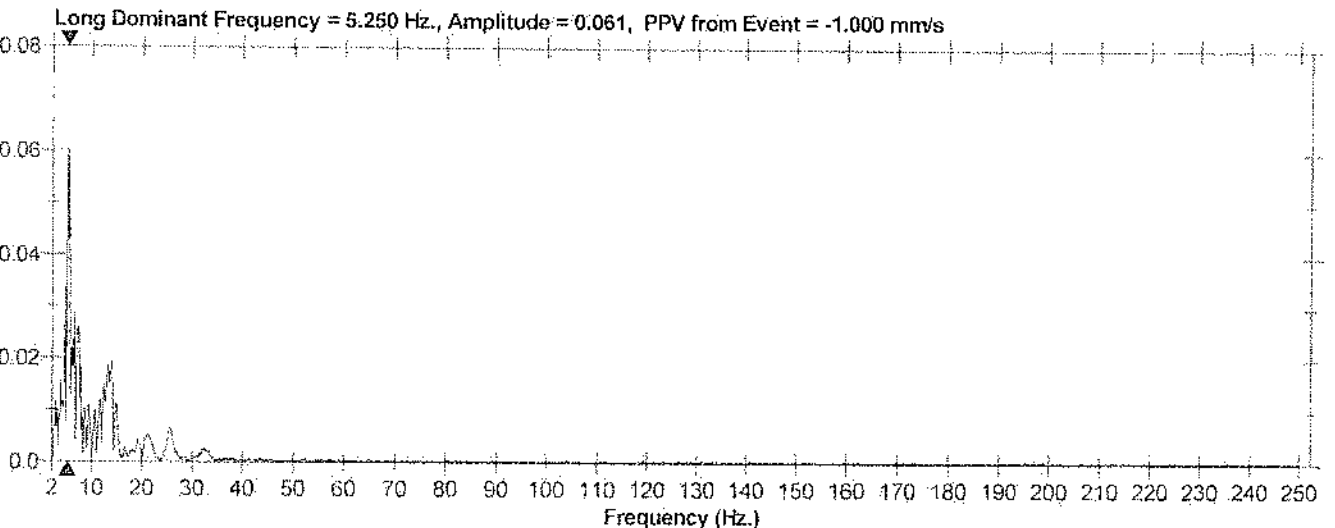
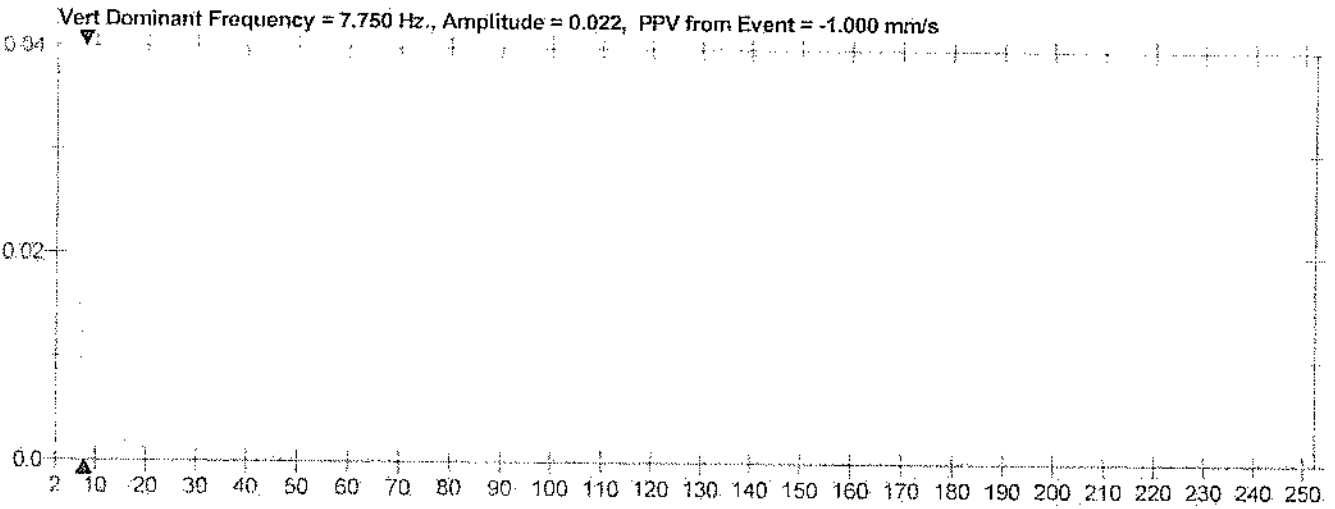
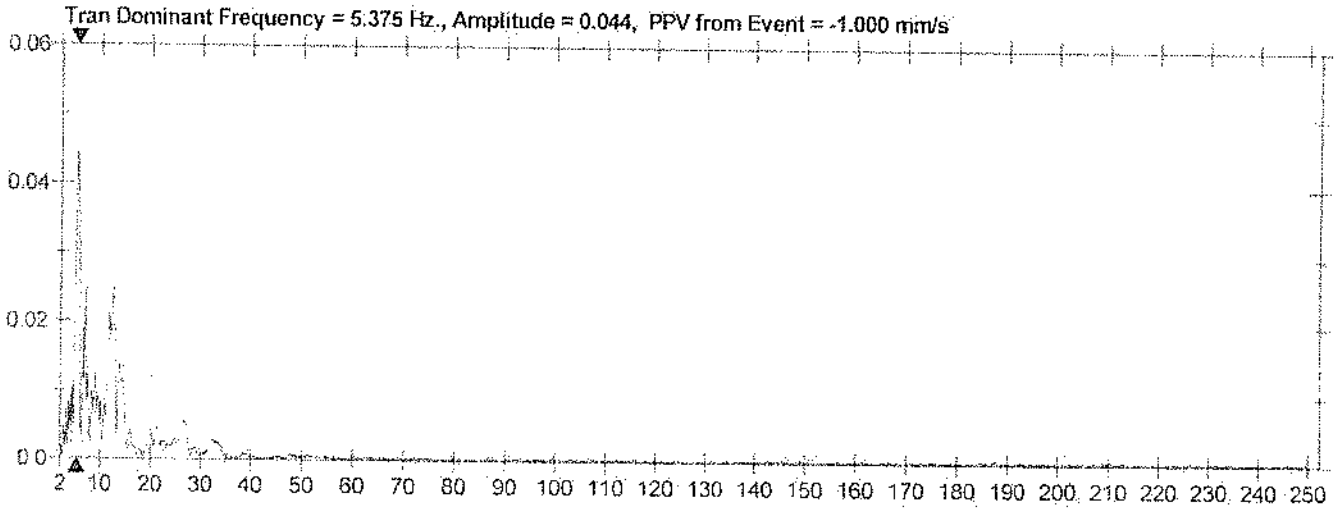
Sensor Check

Date/Time Tran at 13:58:32 December 25, 2025
Trigger Source Geo: 0.500 mm/s
Range Geo: 254.0 mm/s
Record Time 6.0 sec at 1024 sps
Operator/Setup Operator/BDEPL.MMB

Serial Number UM19506 V 10-90GC Micromate ISEE
Battery Level 3.7 Volts
Unit Calibration October 13, 2025 by UES New Delhi
File Name __TEMP.EVT

Notes
Location: On Ground Surface
Client: TSL
User Name: BDEPL
General: KATAMATI IRON MINES

Extended Notes
150 mtrs backside from blasting face.



Date/Time Vert at 13:39:17 December 30, 2025
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extendeded Note.MMB

Serial Number UM15576 V 10-90FB Micromate ISEE
 Battery Level 3.8 Volts
 Unit Calibration June 17, 2025 by UES New Delhi
 File Name UM15576_20251230133917.IDFW

Notes

Location: RL - 816, PIT - 2, KTM
 Client: TATA STEEL LTD.
 User Name: IDL EXPLOSIVE LTD.
 General: KATAMATI IRON MINES

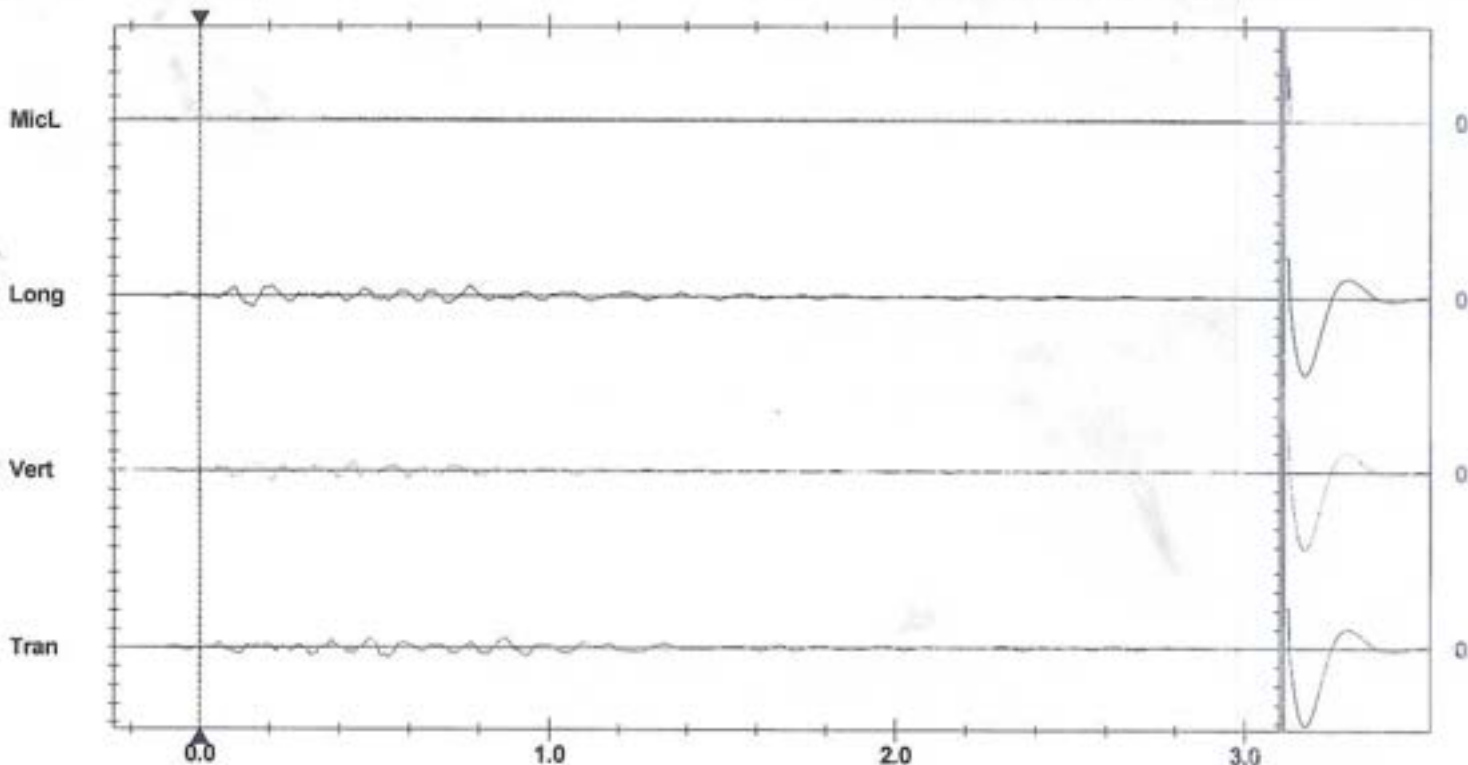
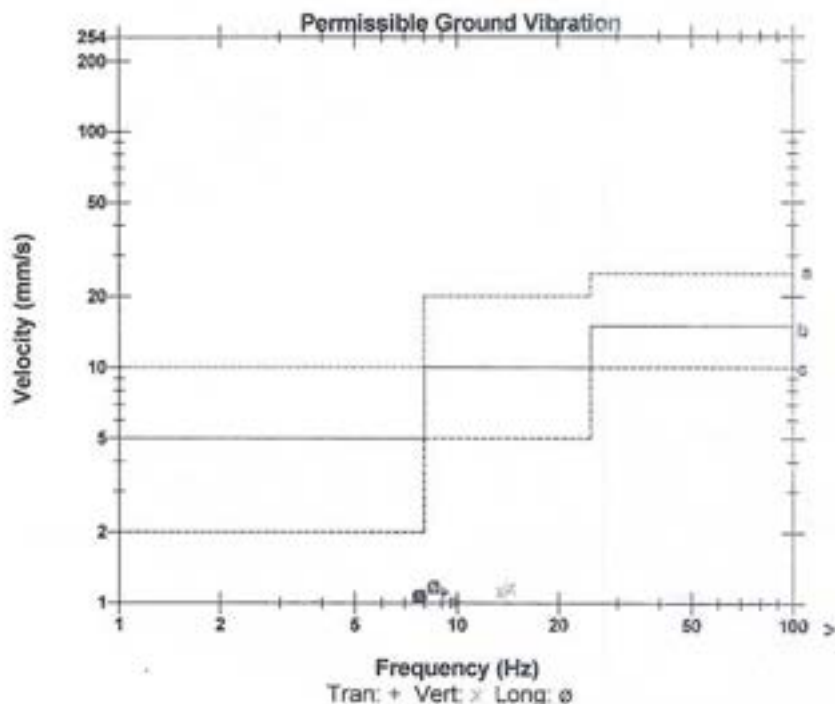
Extended Notes

Microphone Linear Weighting
 PSPL <0.500 pa.(L)
 ZC Freq N/A
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

	Tran	Vert	Long	
PPV	1.103	1.174	1.190	mm/s
ZC Freq	9.1	14.4	8.5	Hz
Time (Rel. to Trig)	0.873	0.208	0.155	sec
Peak Acceleration	0.016	0.021	0.013	g
Peak Displacement	0.018	0.015	0.020	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.1	7.3	7.1	Hz
Overswing Ratio	4.0	4.0	4.0	

Peak Vector Sum 1.608 mm/s at 0.208 sec
 N/A: Not Applicable

DGMS India (A)



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = \blacktriangleleft \blacktriangleright

Sensor Check

Date/Time Vert at 13:39:17 December 30, 2025
Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
Range Geo: 254.0 mm/s
Record Time 3.0 sec at 2048 sps
Operator/Setup: Operator/Extendeded Note.MMB

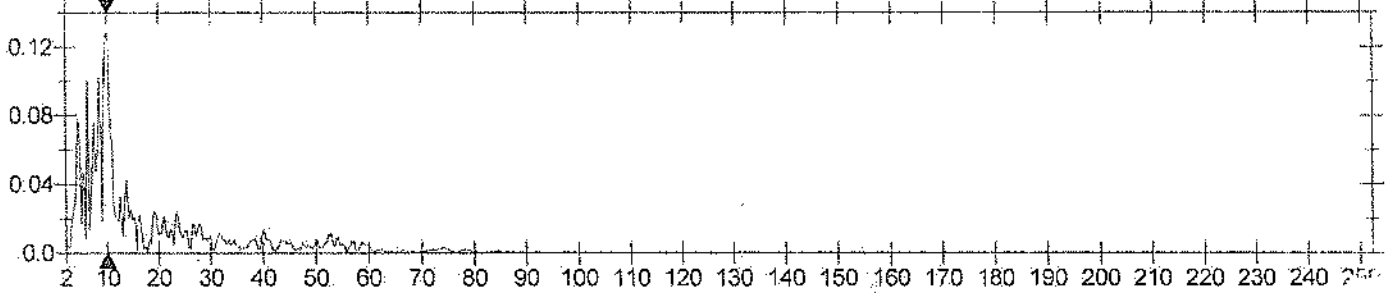
Serial Number UM15576 V 10-90FB Micromate ISEE
Battery Level 3.8 Volts
Unit Calibration June 17, 2025 by UES New Delhi
File Name UM15576_20251230133917.IDFW

Notes

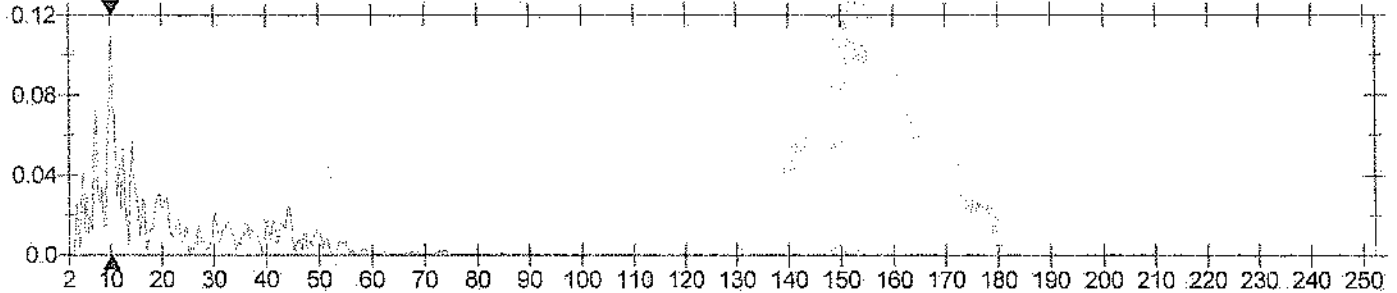
Location: RL - 616, PIT - 2, KTM
Client: TATA STEEL LTD.
User Name: IDL EXPLOSIVE LTD.
General: KATAMATI IRON MINES

Extended Notes

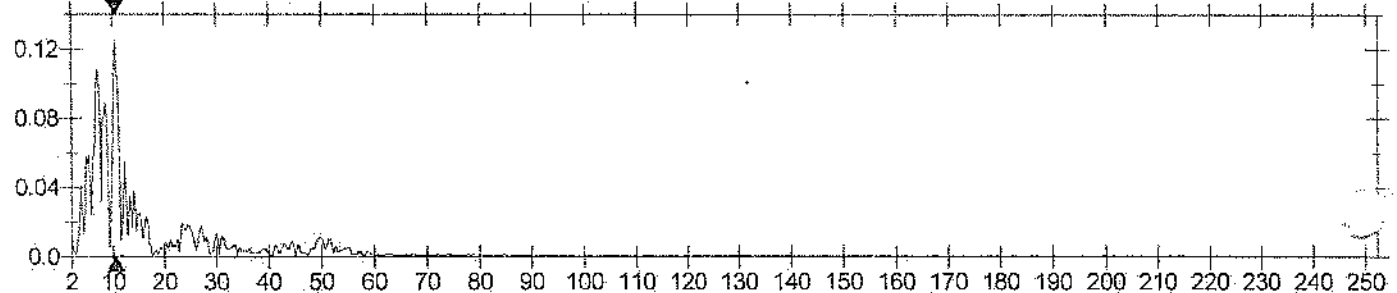
Tran Dominant Frequency = 10.000 Hz., Amplitude = 0.128, PPV from Event = 1.103 mm/s



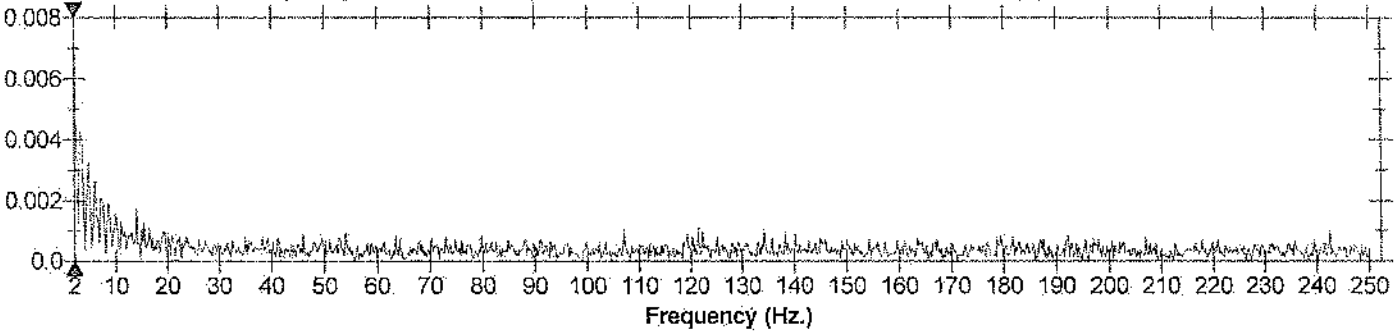
Vert Dominant Frequency = 10.25 Hz., Amplitude = 0.112, PPV from Event = 1.174 mm/s



Long Dominant Frequency = 10.50 Hz., Amplitude = 0.125, PPV from Event = 1.190 mm/s



MicL Dominant Frequency = 2.000 Hz., Amplitude = 0.007, PSPL From Event = 0.124 pa.(L)



Date/Time Tran at 13:45:09 January 17, 2026
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
 Battery Level 3.8 Volts
 Unit Calibration February 20, 2025 by UES New Delhi
 File Name UM20055_20260117134509.IDFW

Notes

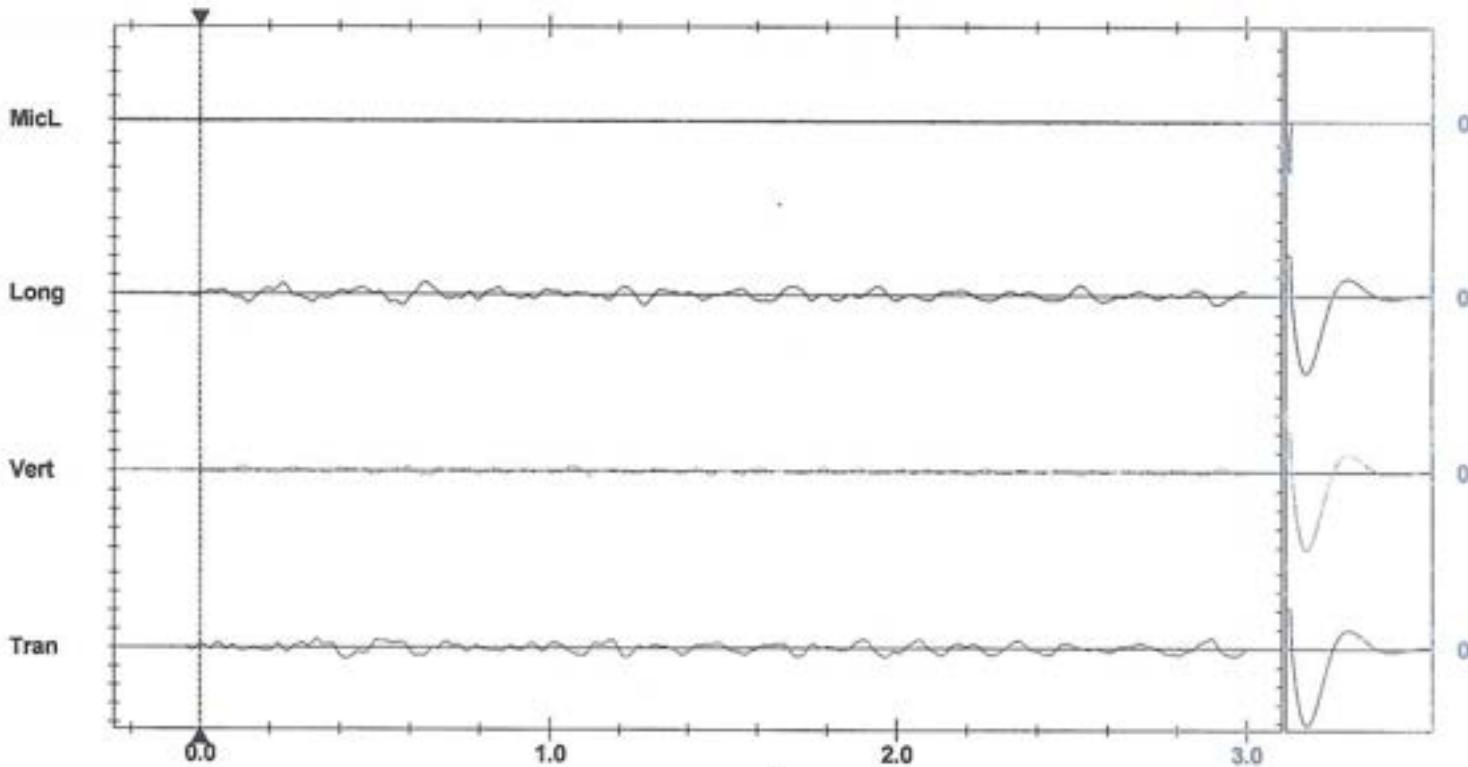
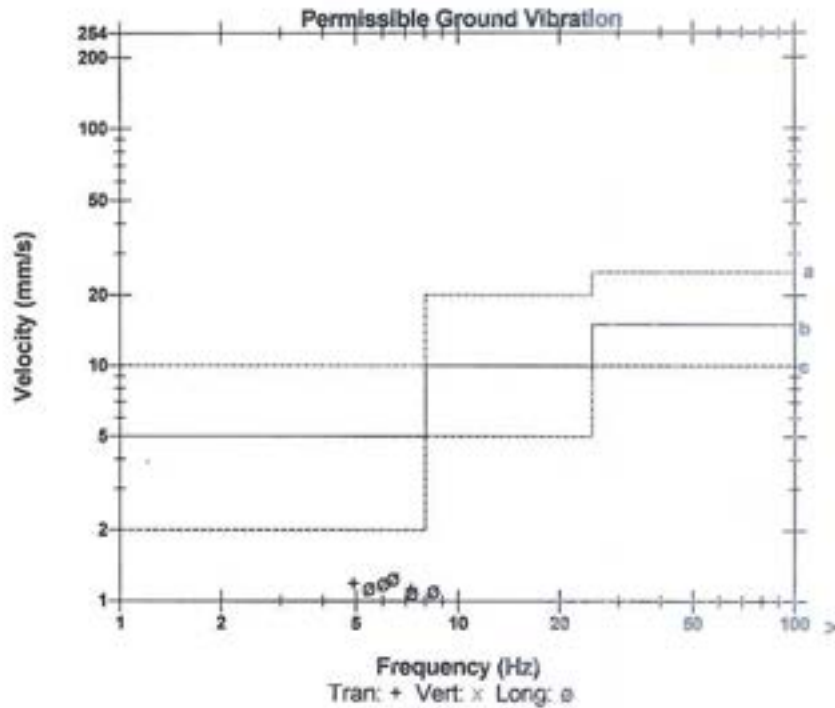
Location: PIT - 1 , RL - 690 , KTM
 Client: TATA STEEL LIMITED.
 User Name: IDL EXPLOSIVE LTD
 General: KATAMATI IRON MINE

Microphone Linear Weighting
 PSPL <0.500 pa.(L)
 ZC Freq 45 Hz
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

	Tran	Vert	Long	
PPV	1.182	0.512	1.253	mm/s
ZC Freq	4.9	7.0	6.4	Hz
Time (Rel. to Trig)	0.421	0.122	0.647	sec
Peak Acceleration	0.013	0.010	0.015	g
Peak Displacement	0.034	0.009	0.029	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.2	4.6	4.5	

Peak Vector Sum 1.524 mm/s at 0.640 sec
 N/A: Not Applicable

DGMS India (A)



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = \blacktriangleleft

Sensor Check

T. Sahasr
 for IDL Explosives Limited

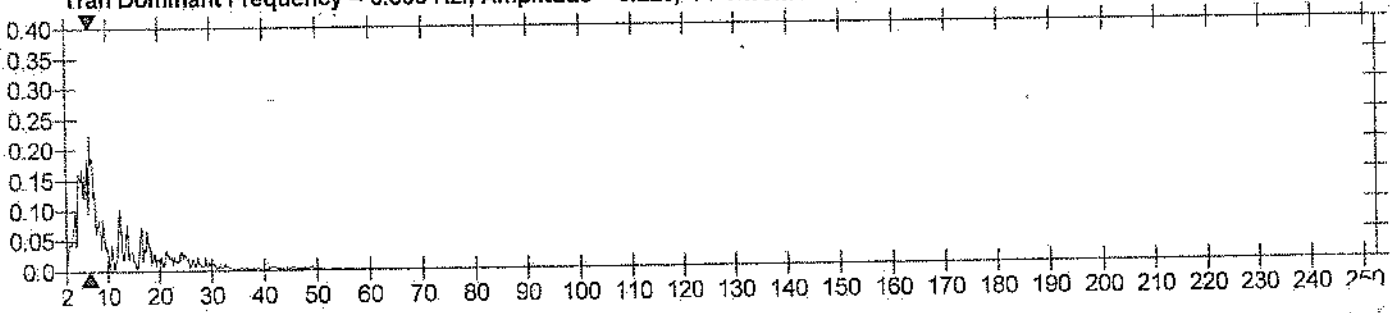
Date/Time Tran at 13:45:09 January 17, 2026
Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
Range Geo: 254.0 mm/s
Record Time 3.0 sec at 2048 sps
Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
Battery Level 3.8 Volts
Unit Calibration February 20, 2025 by UES New Delhi
File Name UM20055_20260117134509.IDFW

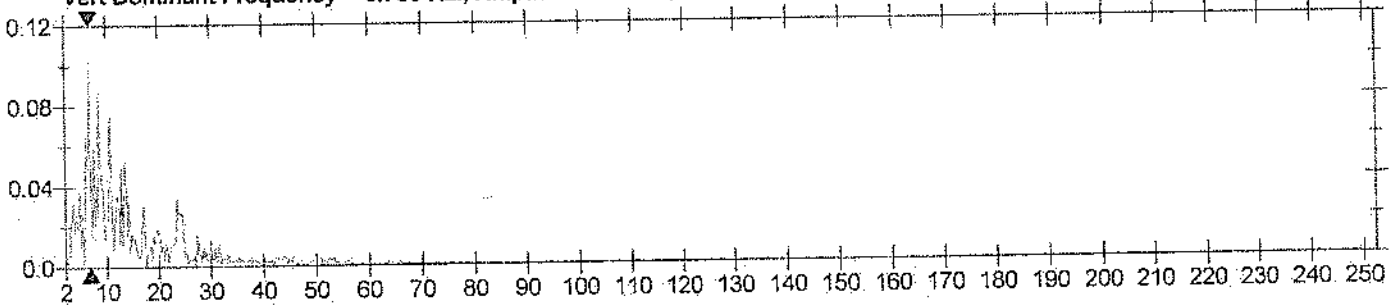
Notes

Location: PIT - 1 , RL - 690 , KTM
Client: TATA STEEL LIMITED.
User Name: IDL EXPLOSIVE LTD
General: KATAMATI IRON MINE

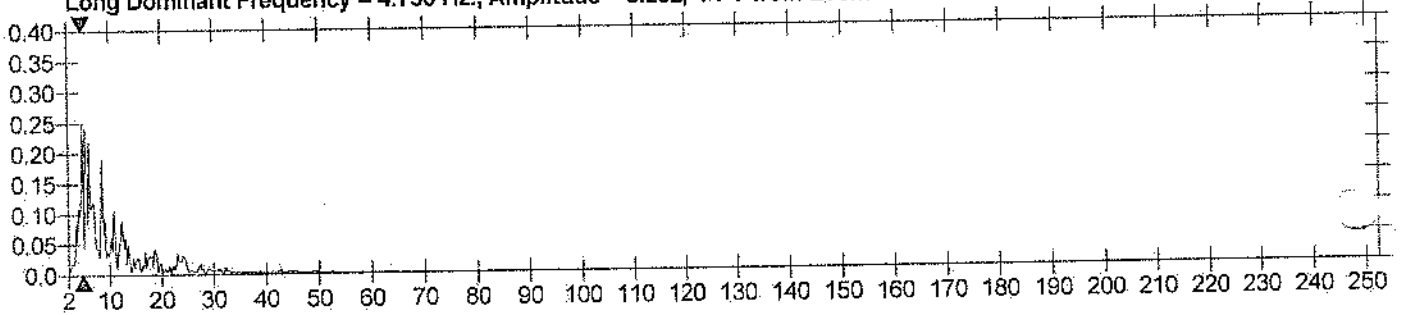
Tran Dominant Frequency = 6.500 Hz., Amplitude = 0.226, PPV from Event = 1.182 mm/s



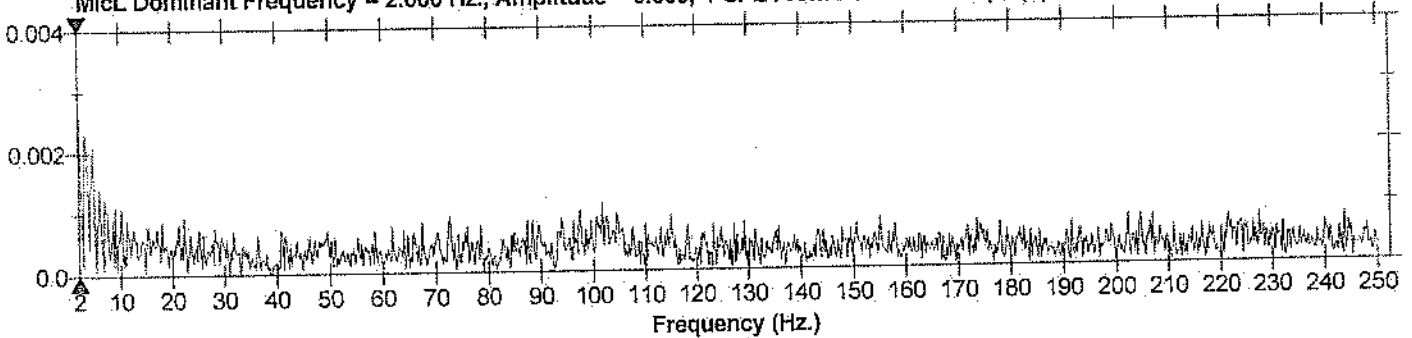
Vert Dominant Frequency = 6.750 Hz., Amplitude = 0.103, PPV from Event = 0.512 mm/s



Long Dominant Frequency = 4.750 Hz., Amplitude = 0.252, PPV from Event = 1.253 mm/s



MicL Dominant Frequency = 2.000 Hz., Amplitude = 0.003, PSPL From Event = 0.093 pa.(L)



Date/Time: Tran at 14:30:27 January 19, 2026
 Trigger Source: Geo: 0.500 mm/s
 Range: Geo: 254.0 mm/s
 Record Time: 6.0 sec at 1024 sps
 Operator/Setup: Operator/BDEPL/MMB

Serial Number: UM19506 V 10-90GC Micromate ISEE
 Battery Level: 3.6 Volts
 Unit Calibration: October 13, 2025 by UES New Delhi
 File Name: __TEMP.EVT

Notes

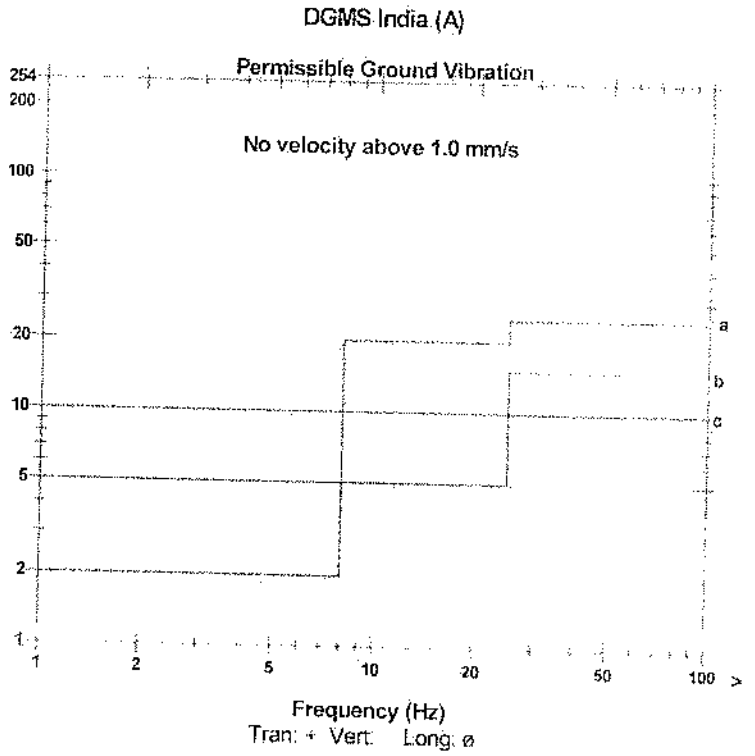
Location: On Ground Surface
 Client: TSL
 User Name: BDEPL
 General: KATAMATI IRON MINES

Extended Notes

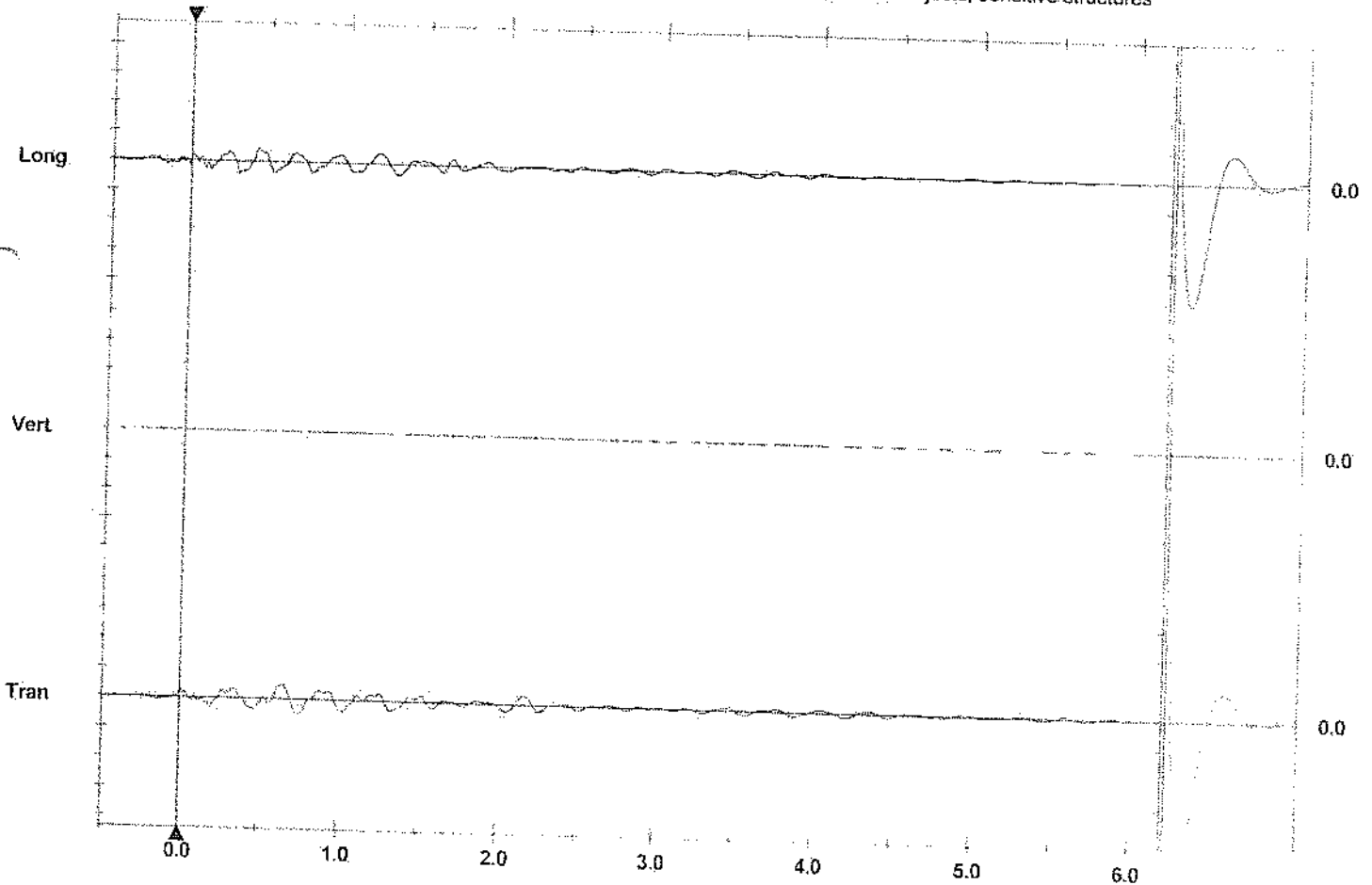
150 mtrs backside from blasting face.

	Tran	Vert	Long	
PPV	0.969	0.426	0.899	mm/s
ZC Freq	4.6	4.7	5.3	Hz
Time (Rel. to Trig)	0.646	0.785	0.423	sec
Peak Acceleration	0.009	0.008	0.007	g
Peak Displacement	0.034	0.015	0.028	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.3	Hz
Overswing Ratio	4.2	3.6	4.2	

Peak Vector Sum 1.181 mm/s at 0.764 sec



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.000 mm/s/div
 Trigger = >

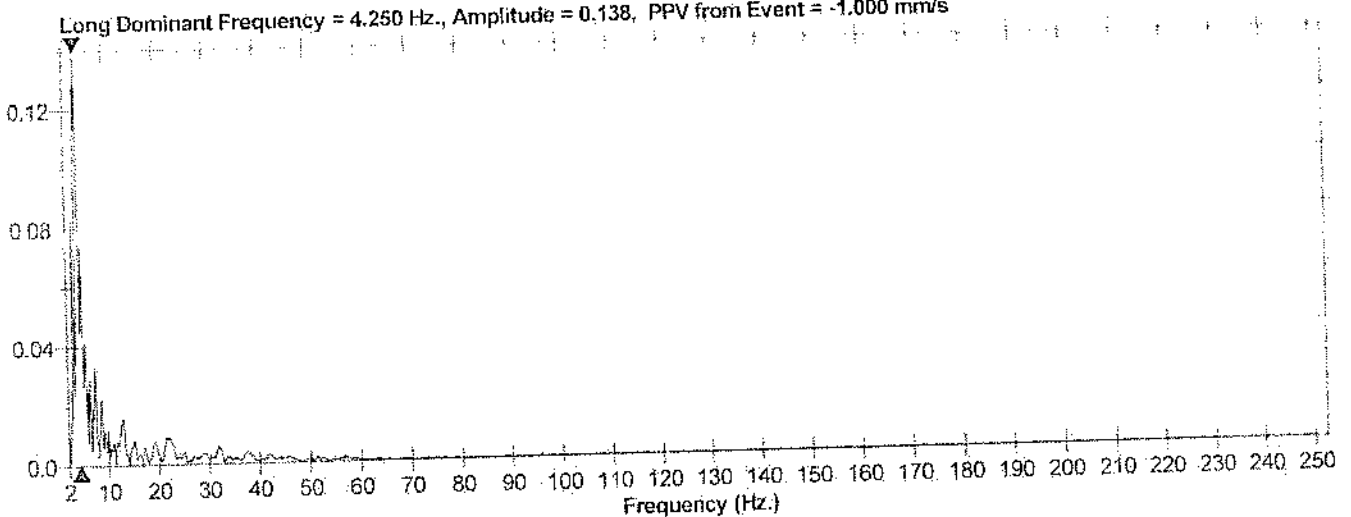
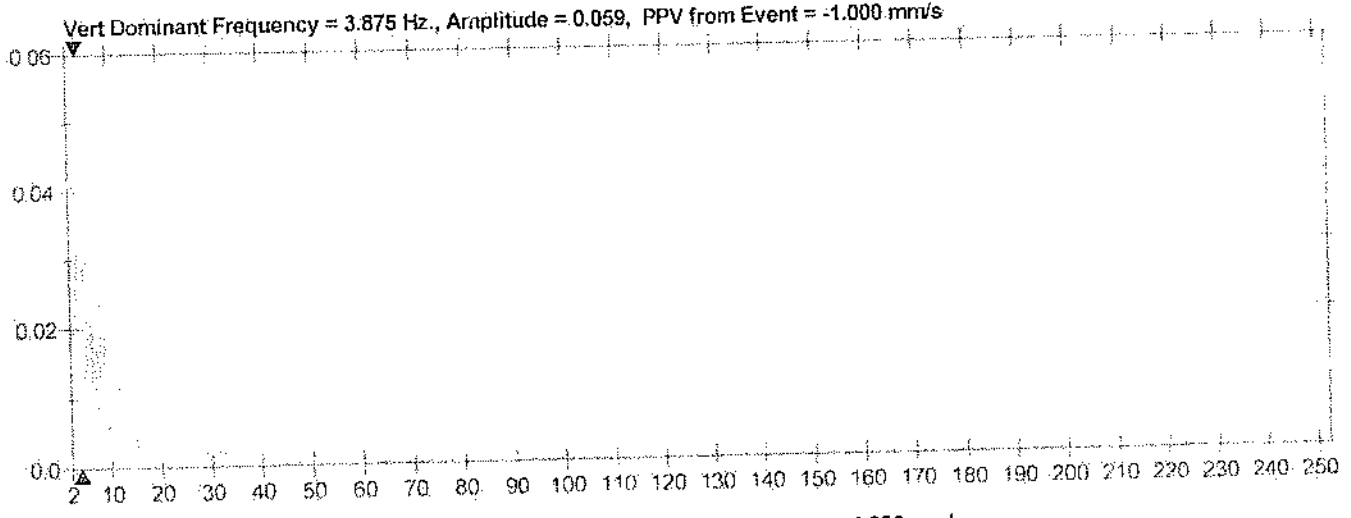
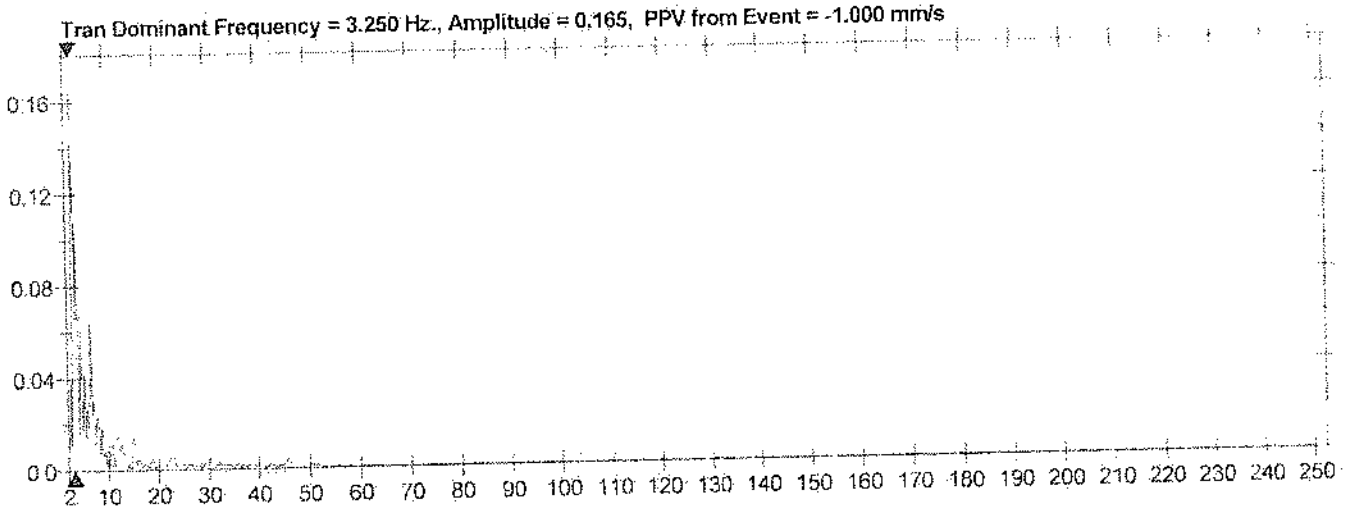
Sensor Check

Date/Time Tran at 14:30:27 January 19, 2026
Trigger Source Geo: 0.500 mm/s
Range Geo: 254.0 mm/s
Record Time 6.0 sec at 1024 sps
Operator/Setup: Operator/BDEPL/MMB

Serial Number UM19506 V 10-90GC Micromate ISEE
Battery Level 3.6 Volts
Unit Calibration October 13, 2025 by UES New Delhi
File Name: __TEMP.EVT

Notes
Location: On Ground Surface
Client: TSL
User Name: BDEPL
General: KATAMATI IRON MINES

Extended Notes
150 mtrs backside from blasting face.



Date/Time Long at 13:40:56 January 24, 2026
 Trigger Source Geo: 0.500 mm/s
 Range Geo: 254.0 mm/s
 Record Time 1.0 sec at 2048 sps
 Operator/Setup: Operator/KATAMATI RL-678.mmb

Serial Number UM21106 V 10-90GC Micromate ISEE
 Battery Level 3.7 Volts
 Unit Calibration October 8, 2025 by UES New Delhi
 File Name __TEMP.EVT

Notes

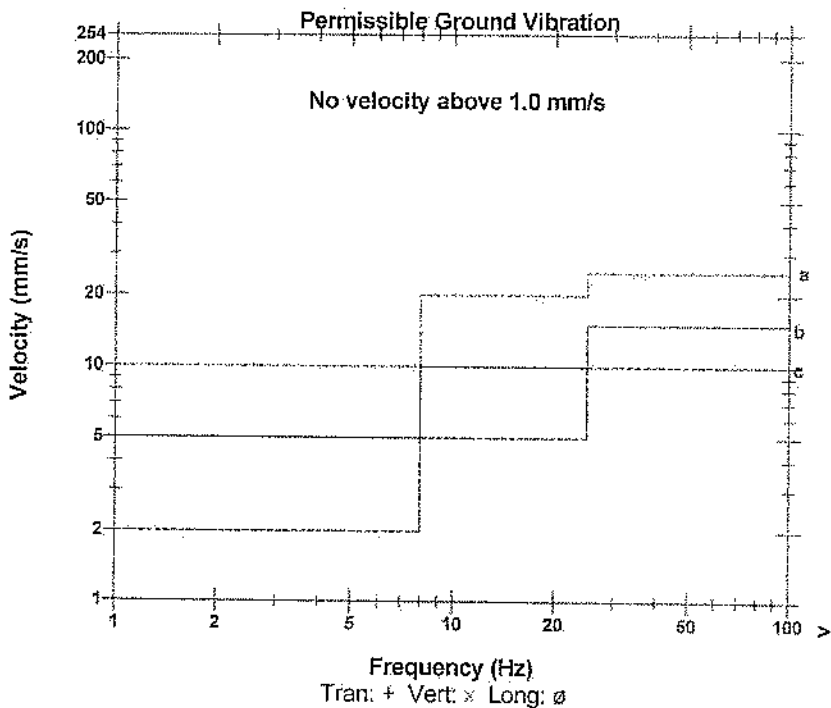
Location: KATAMATI RL-678
 Client: TATA STEEL-KATAMATI IRON MINE
 User Name: SOLAR INDUSTRIES INDIA LTD
 General: KATAMATI IRON MINE

Microphone Linear Weighting
 PSPL <88 dB(L)
 ZC Freq N/A
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

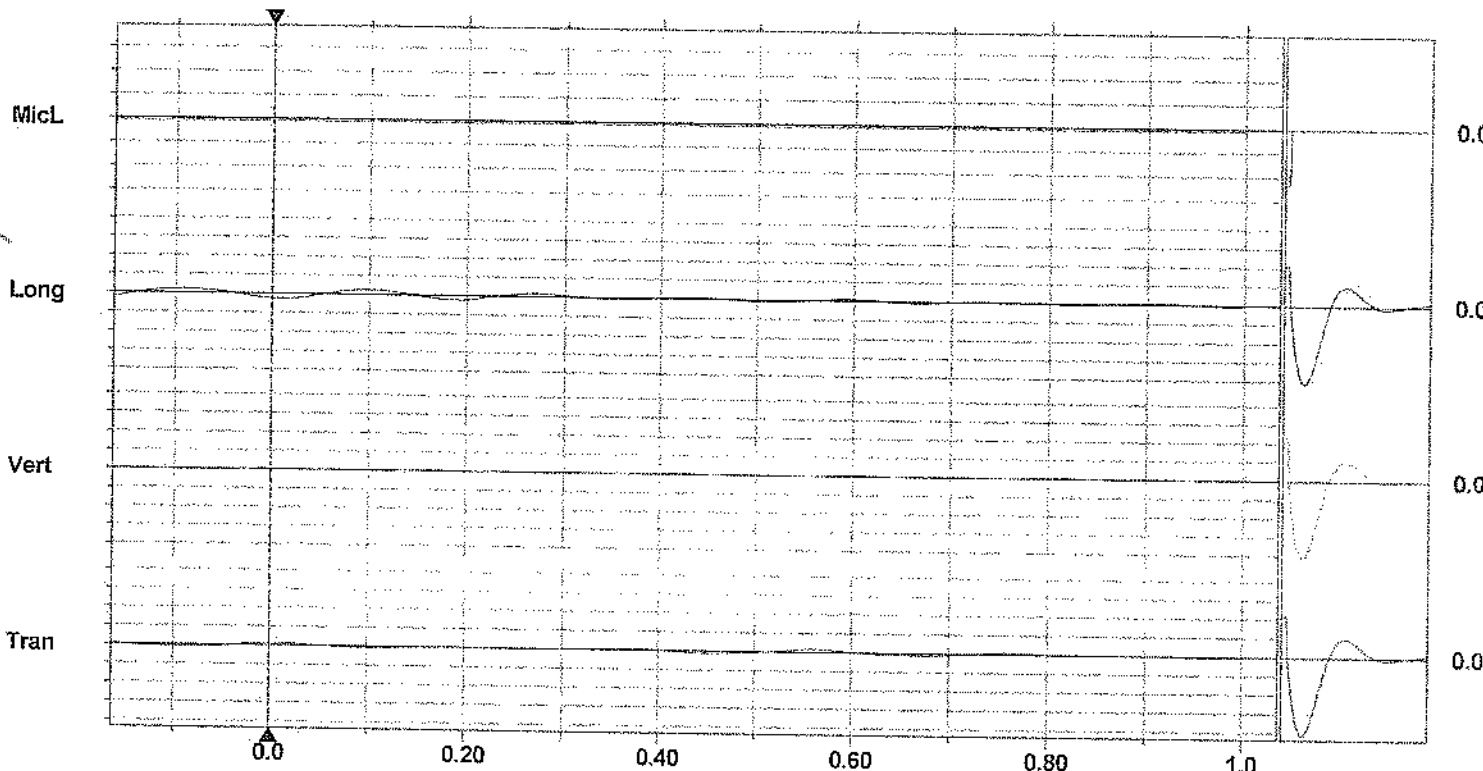
	Tran	Vert	Long	
PPV	0.347	0.221	0.528	mm/s
ZC Freq	5.5	N/A	5.6	Hz
Time (Rel. to Trig)	0.556	-0.152	0.005	sec
Peak Acceleration	0.010	0.008	0.010	g
Peak Displacement	0.010	0.005	0.015	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.3	Hz
Overswing Ratio	4.1	3.9	4.0	

Peak Vector Sum 0.623 mm/s at 0.005 sec
 N/A: Not Applicable

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



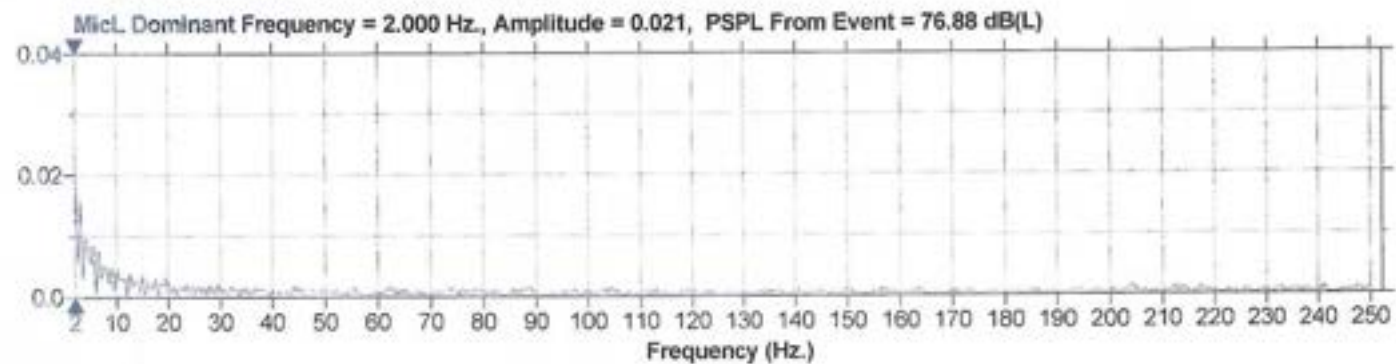
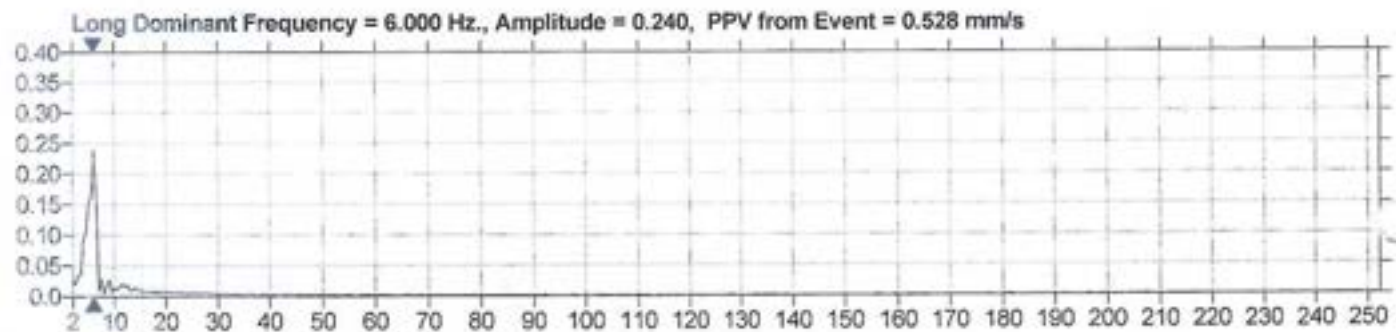
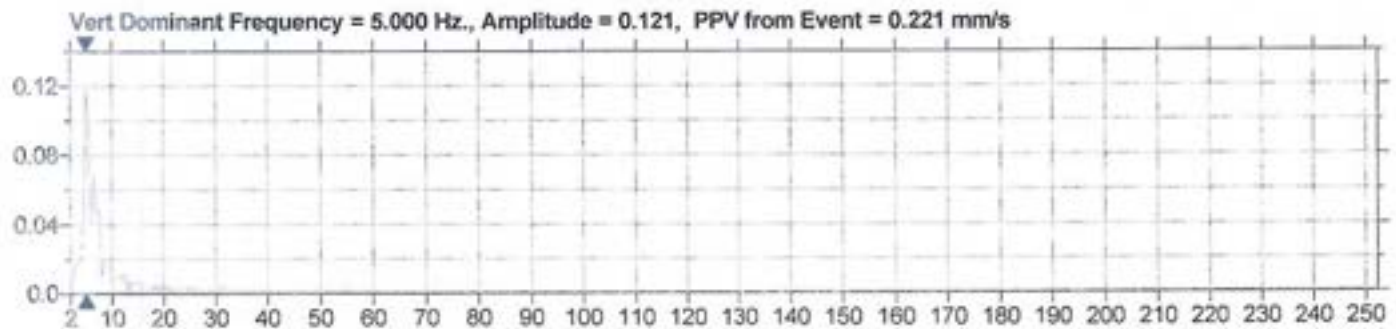
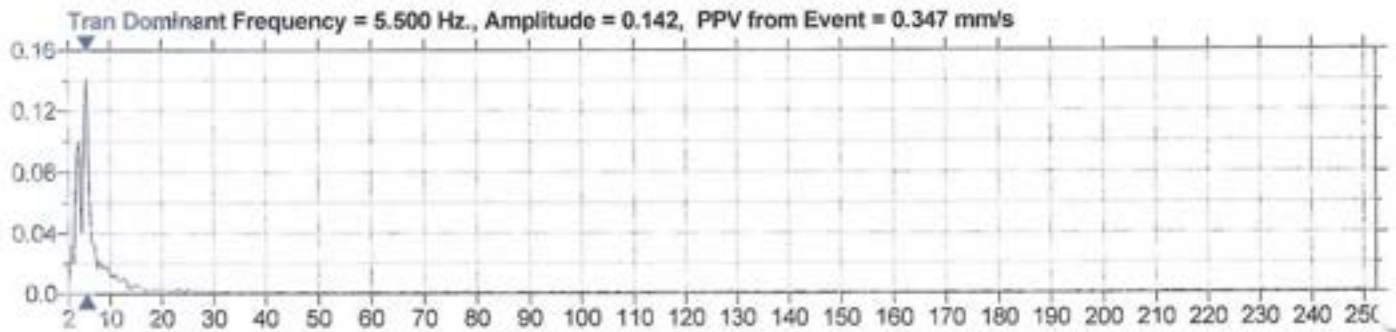
Time Scale: 0.10 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = $\blacktriangleleft \blacktriangleright$

Sensor Check

Date/Time Long at 13:40:56 January 24, 2026
 Trigger Source Geo: 0.500 mm/s
 Range Geo: 254.0 mm/s
 Record Time 1.0 sec at 2048 sps
 Operator/Setup: Operator/KATAMATI RL-678.mmb

Serial Number UM21106 V 10-90GC Micromate ISEE
 Battery Level 3.7 Volts
 Unit Calibration October 8, 2025 by UES New Delhi
 File Name _TEMP.EVT

Notes
 Location: KATAMATI RL-678
 Client: TATA STEEL-KATAMATI IRON MINE
 User Name: SOLAR INDUSTRIES INDIA LTD
 General: KATAMATI IRON MINE



Date/Time Vert at 14:20:35 February 18, 2026
 Trigger Source Geo: 0.500 mm/s
 Range Geo: 254.0 mm/s
 Record Time 6.0 sec at 1024 sps
 Operator/Setup: Operator/BDEPL:mmm

Serial Number UM19506 V 10-90GC Micromate ISEE
 Battery Level 3.6 Volts
 Unit Calibration October 13, 2025 by UES New Delhi
 File Name TEMP.EVT

Notes

Location: On Ground Surface
 Client: TSL
 User Name: BDEPL
 General: KATAMATI IRON MINE

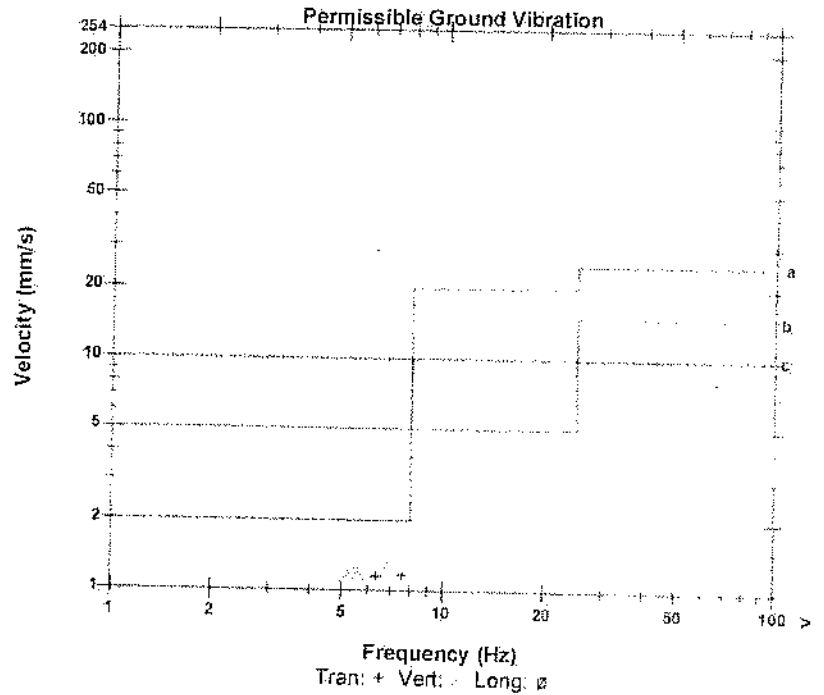
Extended Notes

180 mtrs back side from blasting face.

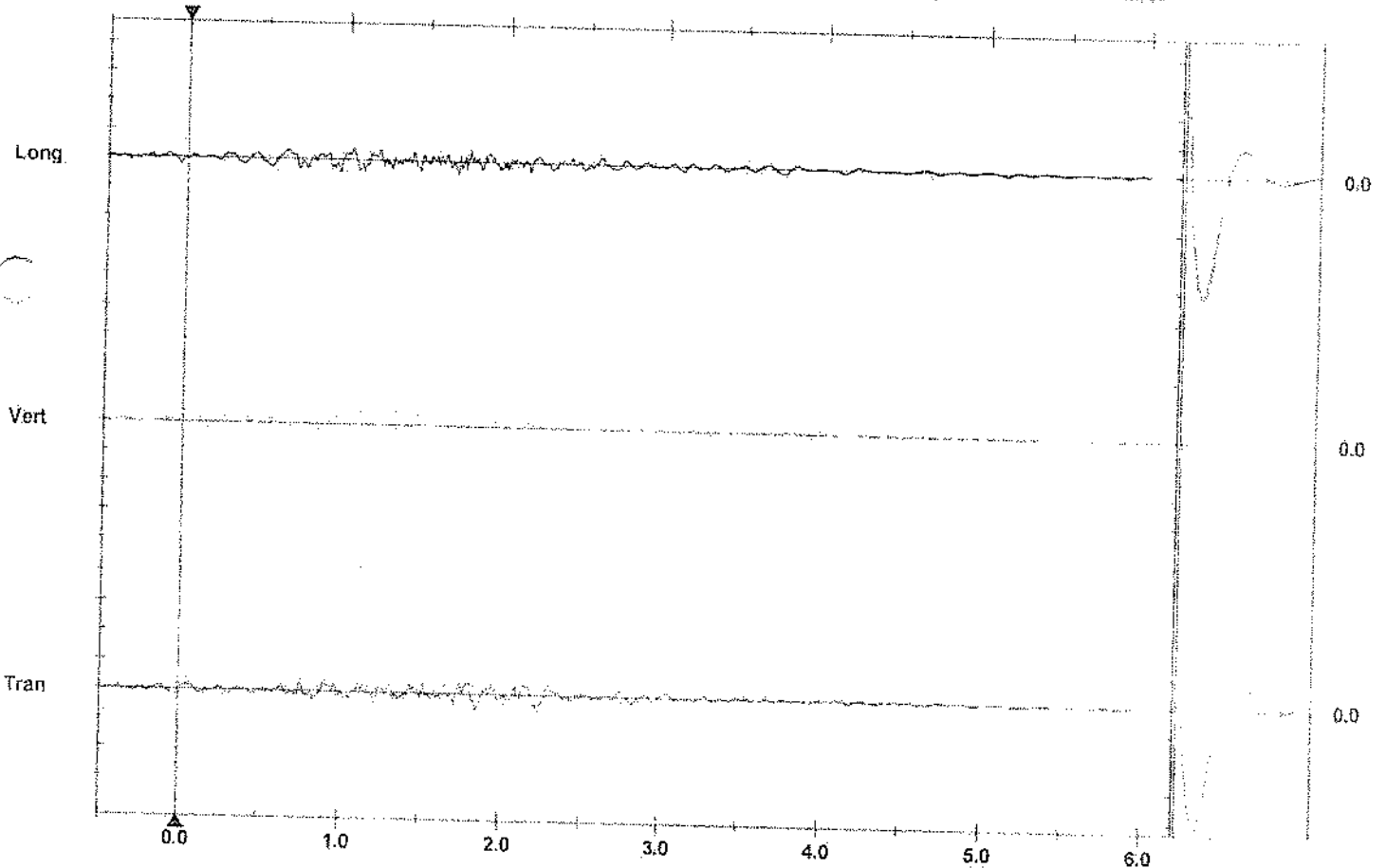
	Tran	Vert	Long	
PPV	1.159	1.277	0.914	mm/s
ZC Freq	7.6	6.6	5.6	Hz
Time (Rel. to Trig)	1.857	1.403	1.027	sec
Peak Acceleration	0.022	0.025	0.027	g
Peak Displacement	0.026	0.031	0.021	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	4.2	3.7	4.1	

Peak Vector Sum 1.471 mm/s at 1.226 sec

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.000 mm/s/div
 Trigger =

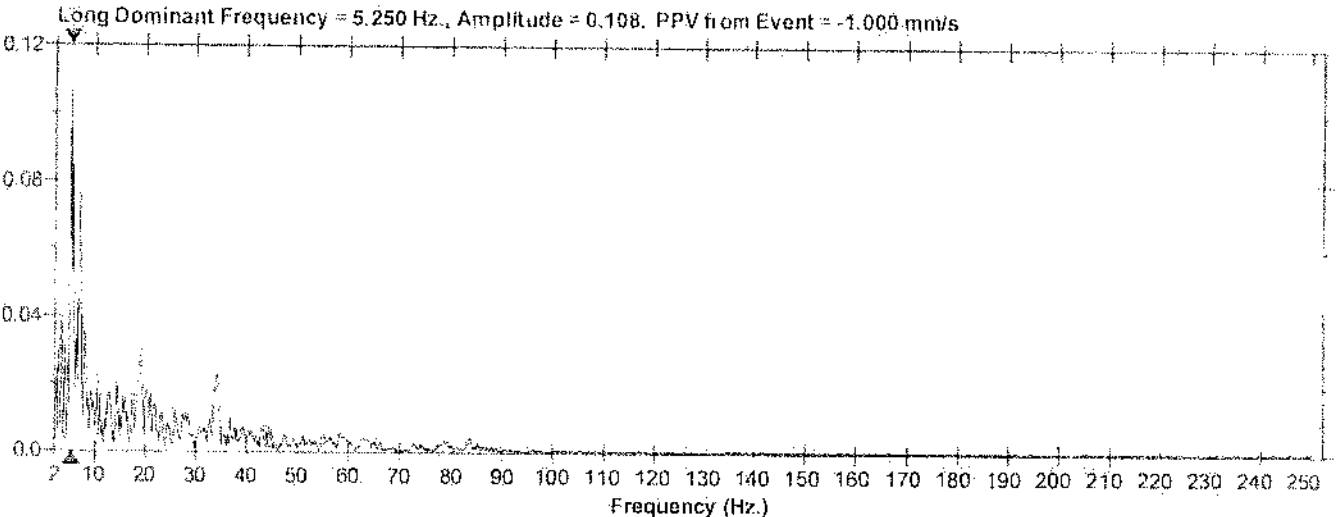
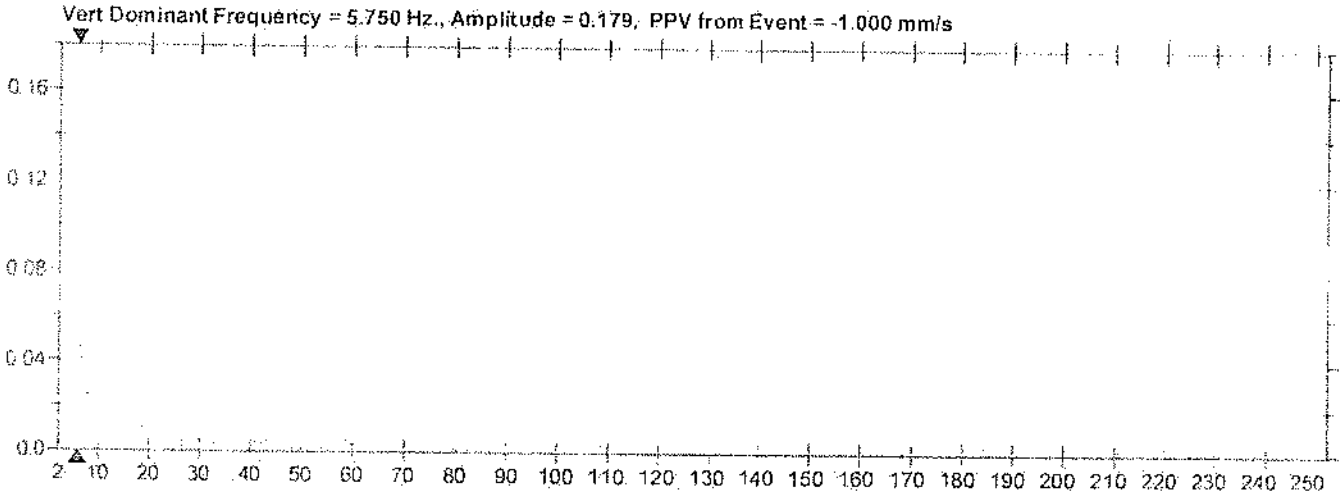
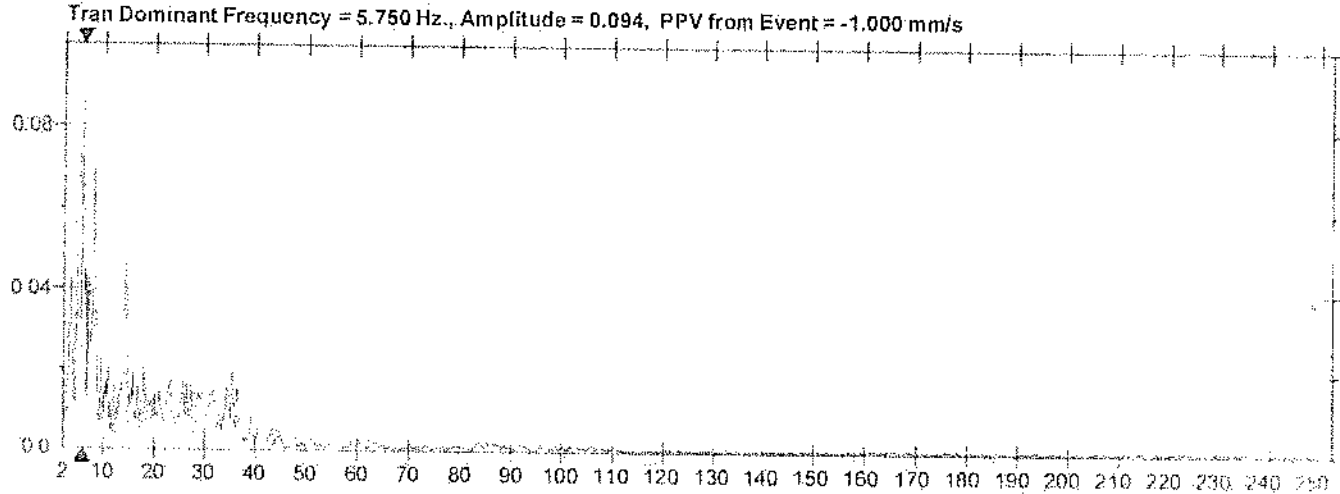
Sensor Check

Date/Time Vert at 14:20:35 February 18, 2026
Trigger Source Geo: 0.500 mm/s
Range Geo: 254.0 mm/s
Record Time 6.0 sec at 1024 sps
Operator/Setup: Operator/BOEPL..mmib

Serial Number UM19506 V-10-90GC Micromate ISEE
Battery Level 3.6 Volts
Unit Calibration October 13, 2025 by ULS New Delhi
File Name ___TEMP.EVT

Notes
Location: On Ground Surface
Client: ISI
User Name: BOEPL
General: KATAMATI IRON MINE

Extended Notes
180 mtrs back side. from blasting face.



Date/Time Tran at 14:25:43 February 20, 2026
 Trigger Source Geo: 0.127 mm/s, Mic: 2.000 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time: 6.0 sec at 1024 sps
 Operator/Setup: Operator/factory.MMB

Serial Number UM21953 V 10-90GC Micromate ISEE
 Battery Level 3.8 Volts
 Unit Calibration December 20, 2025 by UES New Delhi
 File Name: __TEMP.EVT

Notes

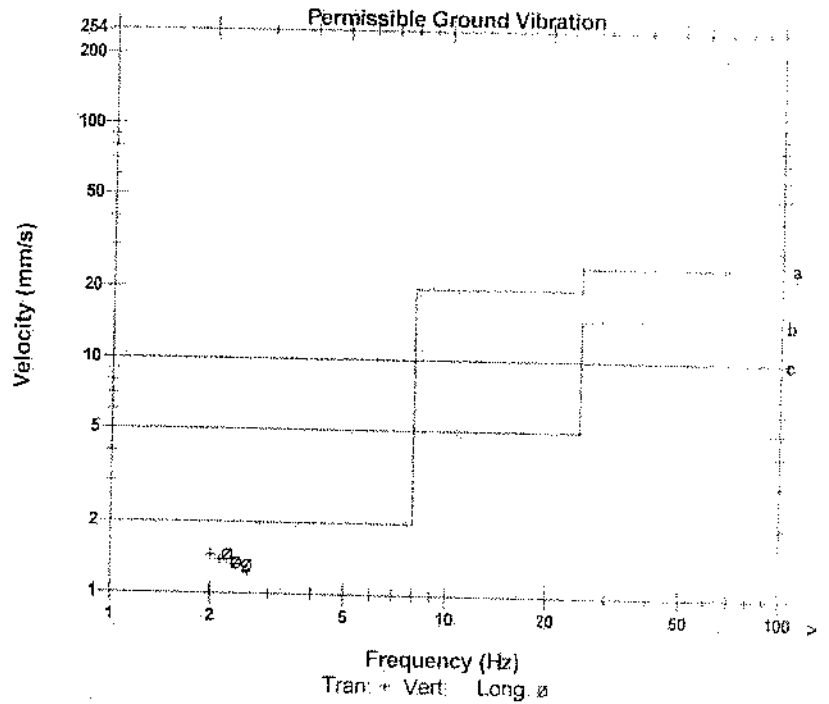
Location: KATAMATI IRON MINE
 Client: TATA STEEL
 User Name: BDEPL
 General:

Microphone Linear Weighting
 PSPL <0.500 pa.(L)
 ZC Freq >100 Hz
 Channel Test Check (Freq = 0.0 Hz, Amp = 0 mv)

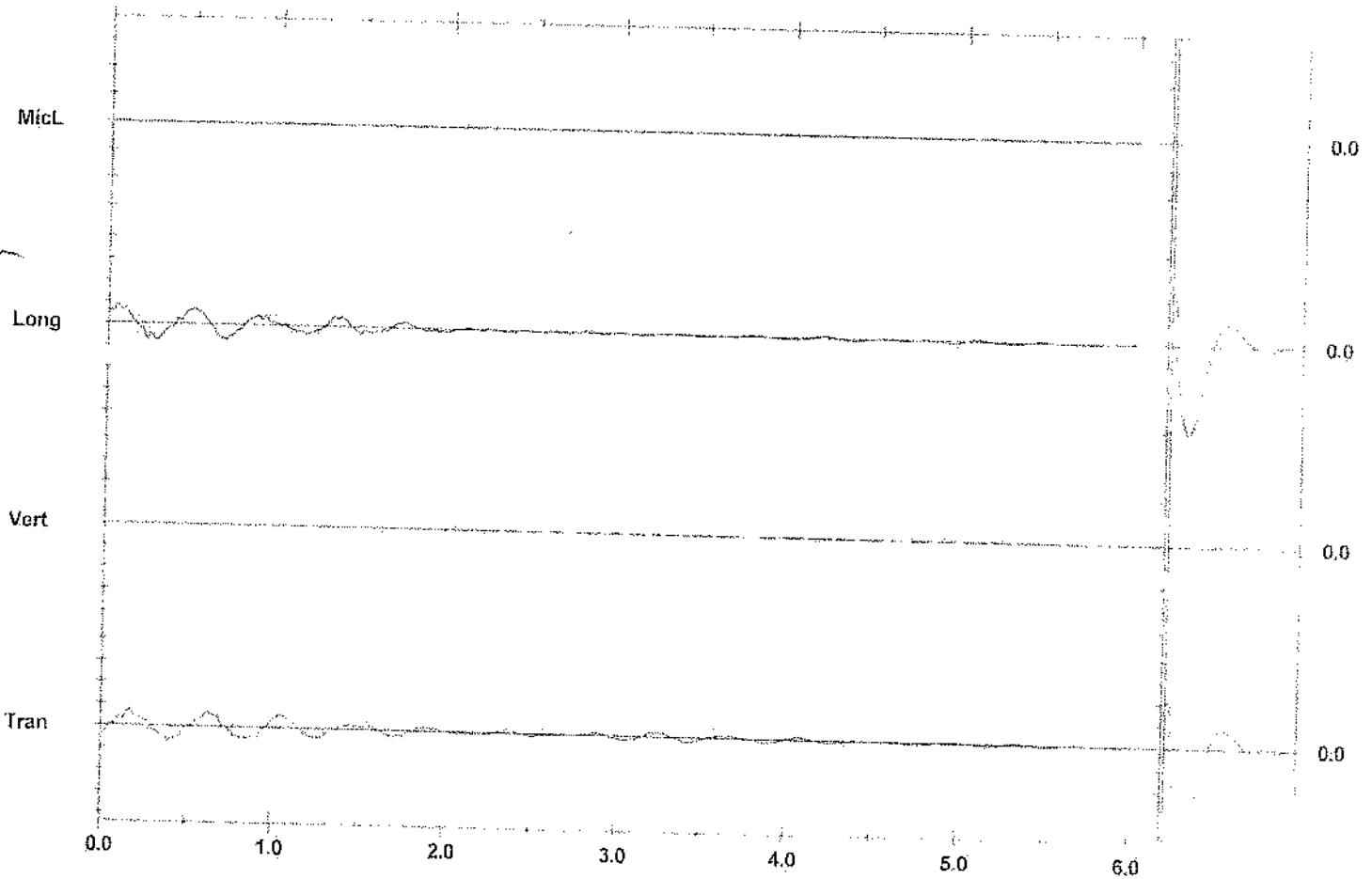
	Tran	Vert	Long	
PPV	1.458	1.048	1.679	mm/s
ZC Freq	2.0	3.3	N/A	Hz
Time (Ref. to Trig)	0.168	0.344	0.055	sec
Peak Acceleration	0.008	0.009	0.008	g
Peak Displacement	0.084	0.048	0.092	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.1	7.5	7.5	Hz
Overswing Ratio	5.0	4.6	4.1	

Peak Vector Sum 1.813 mm/s at 0.684 sec
 N/A: Not Applicable

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



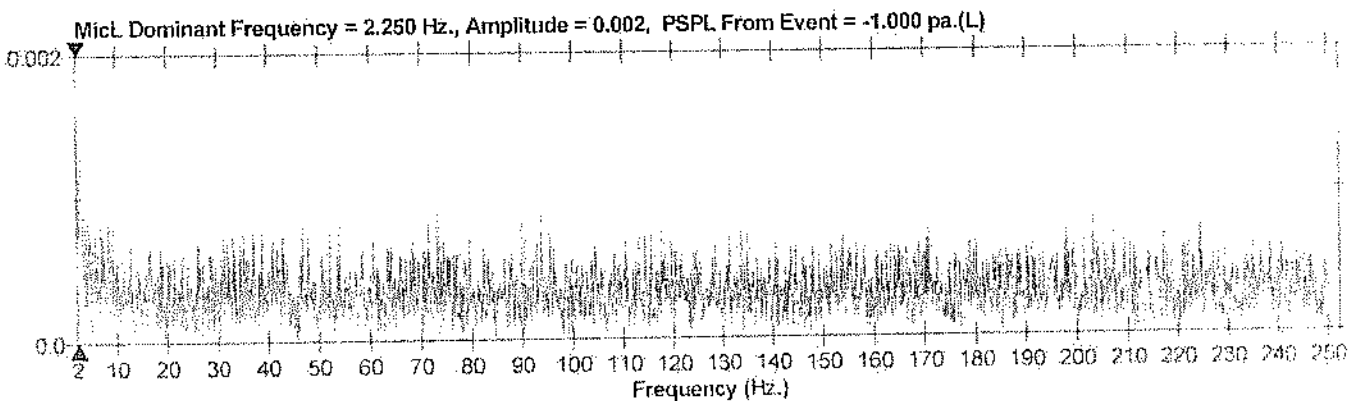
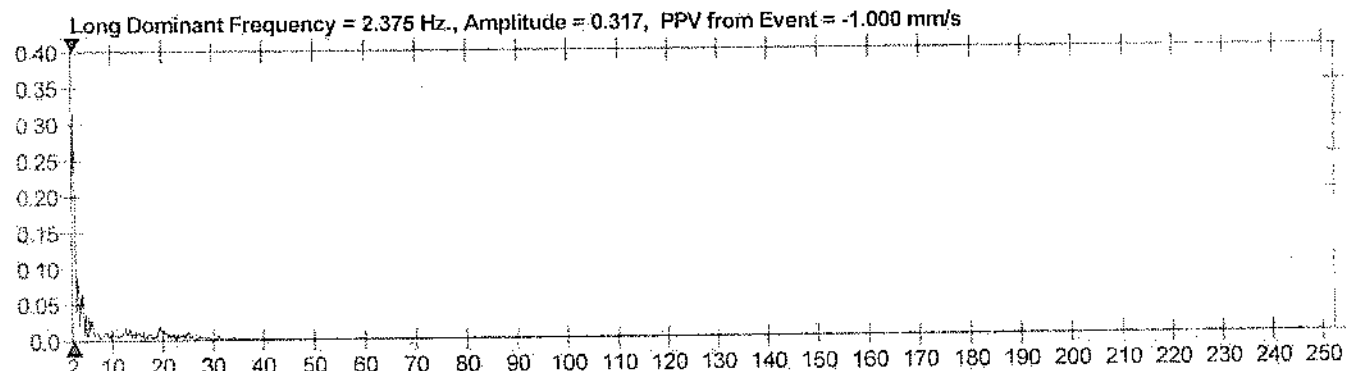
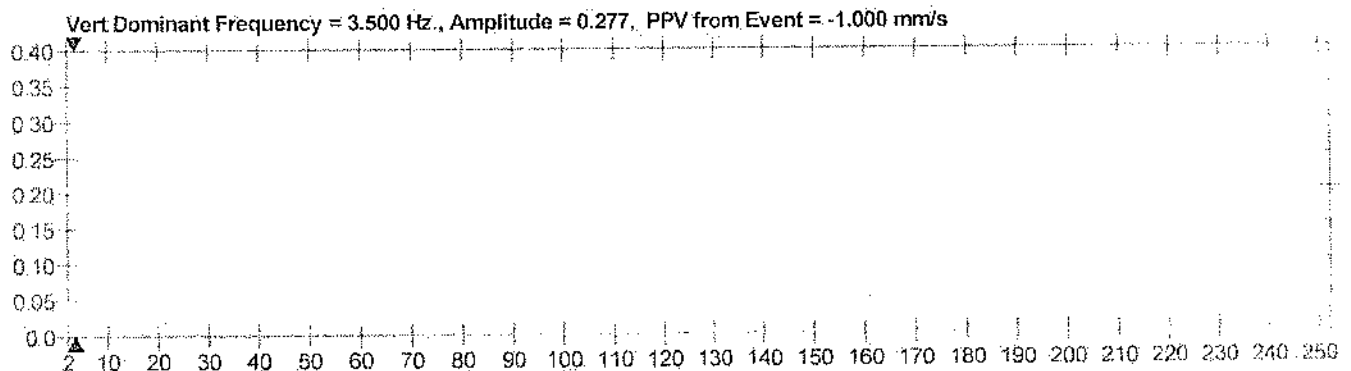
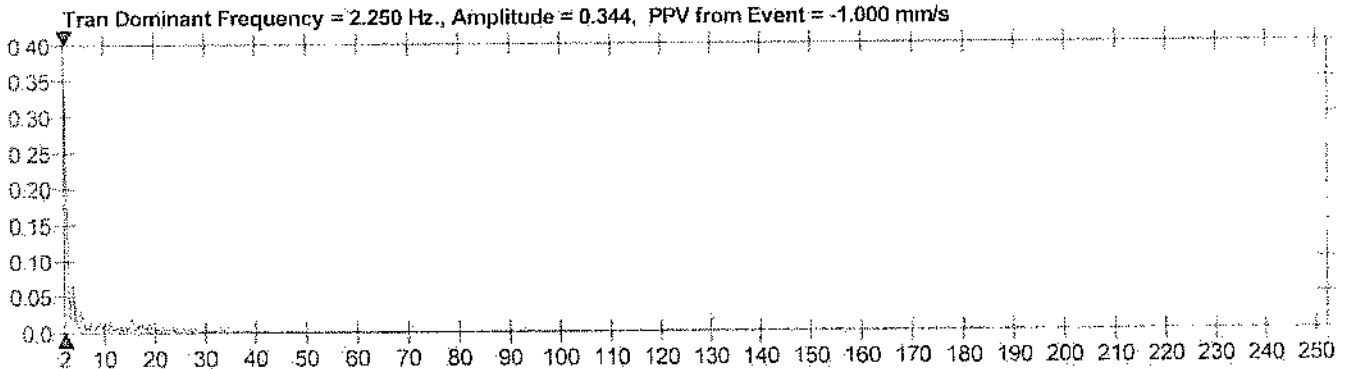
Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div

Sensor Check

Date/Time Tran at 14:25:43 February 20, 2026
Trigger Source Geo: 0.127 mm/s, Mic: 2.000 pa.(L)
Range Geo: 254.0 mm/s
Record Time 6.0 sec at 1024 sps
Operator/Setup: Operator/factory.MMB

Serial Number UM21953 V 10-90GC Micromate ISEE
Battery Level 3.8 Volts
Unit Calibration December 20, 2025 by UES New Delhi
File Name ___TEMP.EVT

Notes
Location: KATAMATI IRON MINE
Client: TATA STEEL
User Name: BDEPL
General:



Date/Time Long at 13:49:58 February 28, 2026
 Trigger Source Geo: 0.500 mm/s
 Range Geo: 254.0 mm/s
 Record Time 1.0 sec at 2048 sps.
 Operator/Setup: Operator/KATAMATI P-1 RL-702.MMB

Serial Number UM21106 V 10-90GC Micromate ISEE
 Battery Level 3.6 Volts
 Unit Calibration October 8, 2025 by UES New Delhi
 File Name __TEMP.EVT

Notes

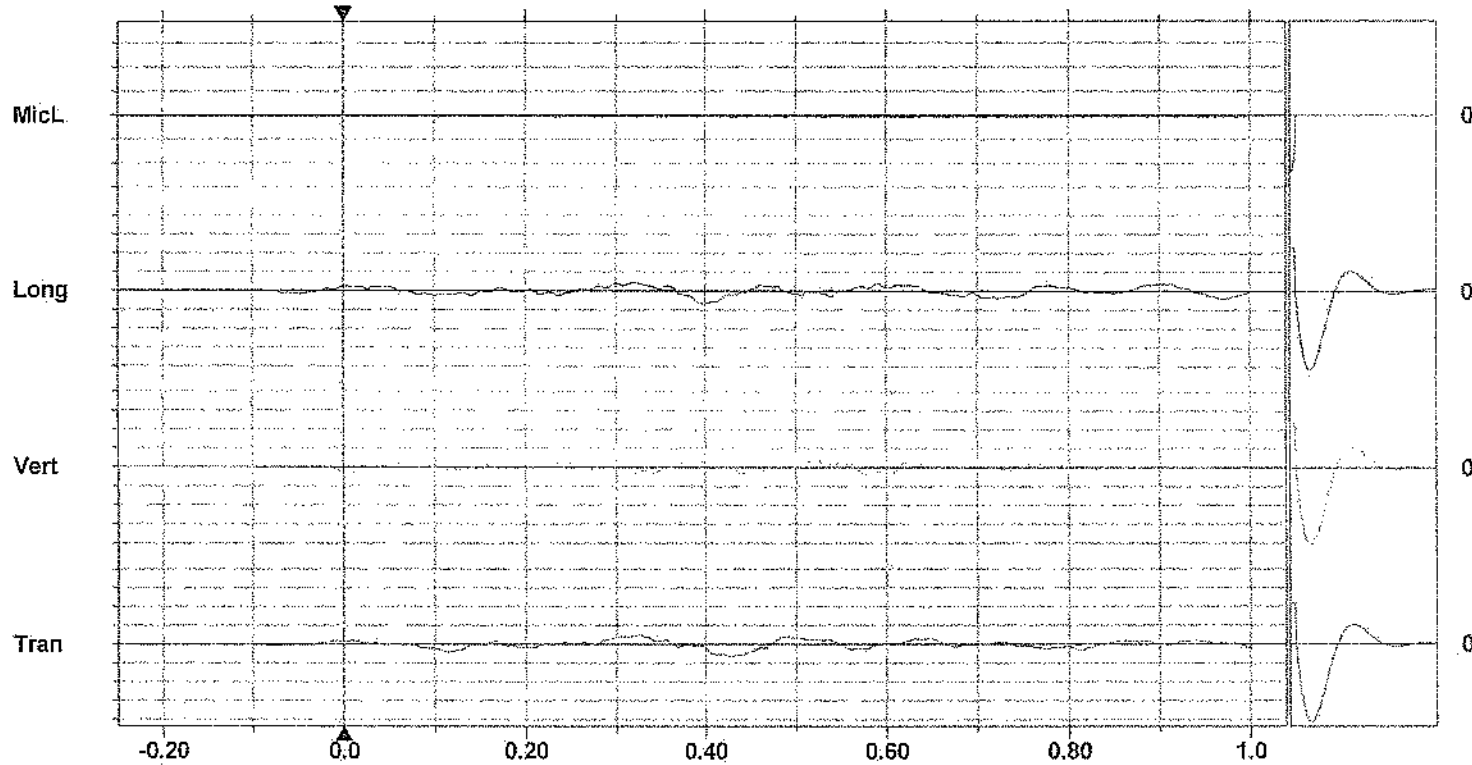
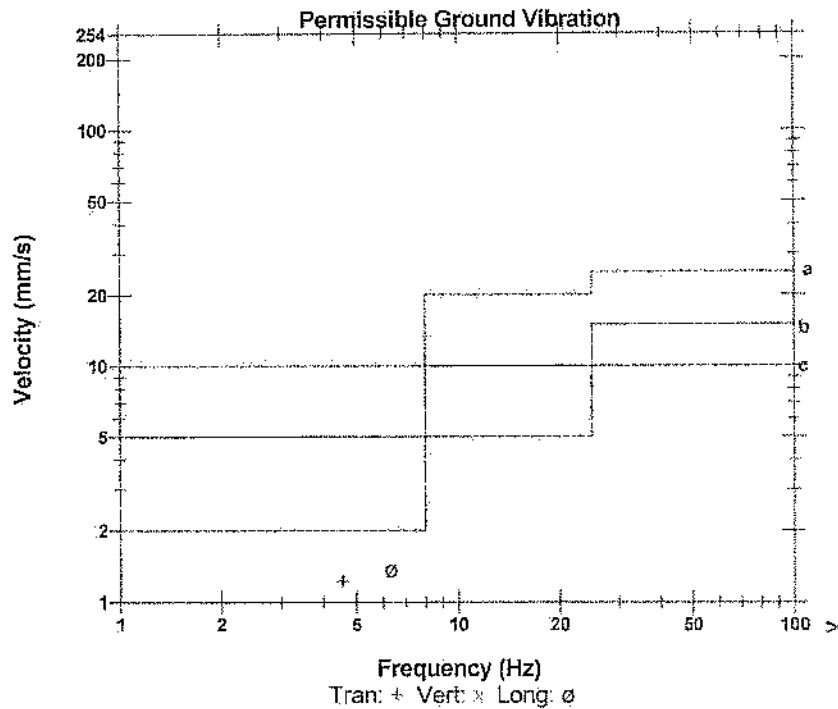
Location: KATAMATI P-1RL-702
 Client: TATA STEEL-KATAMATI IRON MINE
 User Name: SOLAR INDUSTRIES INDIA LTD
 General: KATAMATI IRON MINE

Microphone Linear Weighting
 PSPL <88 dB(L)
 ZC Freq 4.7 Hz
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv.)

	Tran	Vert	Long	
PPV	1.222	0.969	1.371	mm/s
ZC Freq	4.6	7.7	6.3	Hz
Time (Rel. to Trig)	0.426	0.520	0.398	sec
Peak Acceleration	0.015	0.025	0.026	g
Peak Displacement	0.034	0.013	0.027	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	4.1	3.9	3.9	

Peak Vector Sum 1.639 mm/s at 0.412 sec
 N/A: Not Applicable

DGMS India (A)



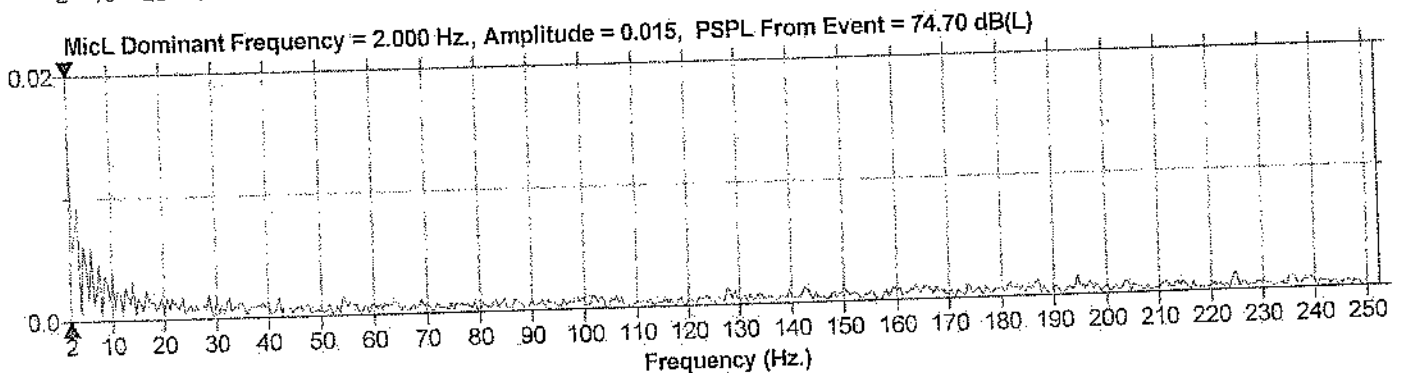
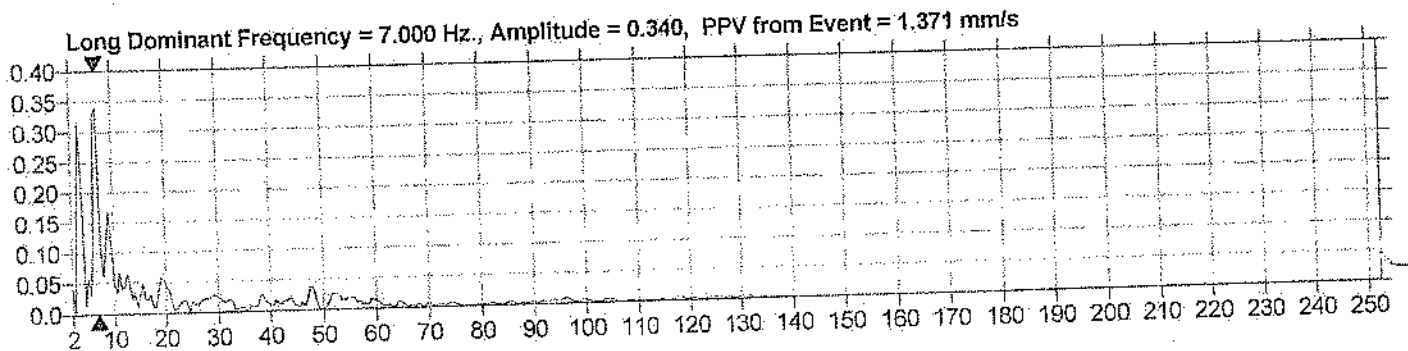
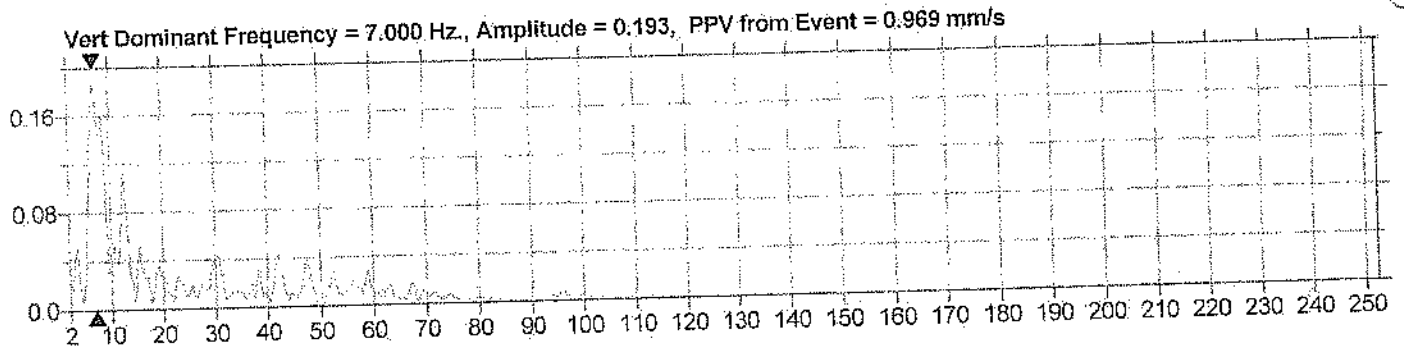
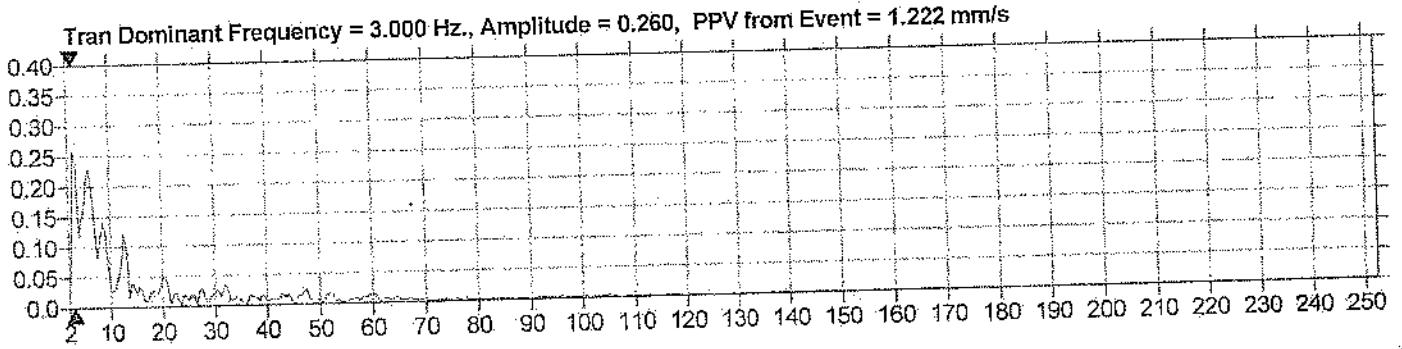
Time Scale: 0.10 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = \blacktriangleleft \blacktriangleright

Sensor Check

Date/Time Long at 13:49:58 February 28, 2026
Trigger Source Geo: 0.500 mm/s
Range Geo: 254.0 mm/s
Record Time 1.0 sec at 2048 sps
Operator/Setup: Operator/KATAMATI P-1 RL-702.MMB

Serial Number UM21106 V 10-90GC Micromate ISEE
Battery Level 3.6 Volts
Unit Calibration October 8, 2025 by UES New Delhi
File Name _TEMP.EVT

Notes
Location: KATAMATI P-1RL-702
Client: TATA STEEL-KATAMATI IRON MINE
User Name: SOLAR INDUSTRIES INDIA LTD
General: KATAMATI IRON MINE



Date/Time Long at 13:52:06 February 28, 2026
 Trigger Source Geo: 0.500 mm/s
 Range Geo: 254.0 mm/s
 Record Time 1.0 sec at 2048 sps.
 Operator/Setup: Operator/KATAMATI P-1 RL-702.MMB

Serial Number UM21106 V 10-90GC Micromate ISEE
 Battery Level 3.6 Volts
 Unit Calibration October 8, 2025 by UES New Delhi
 File Name __TEMP.EVT

Notes

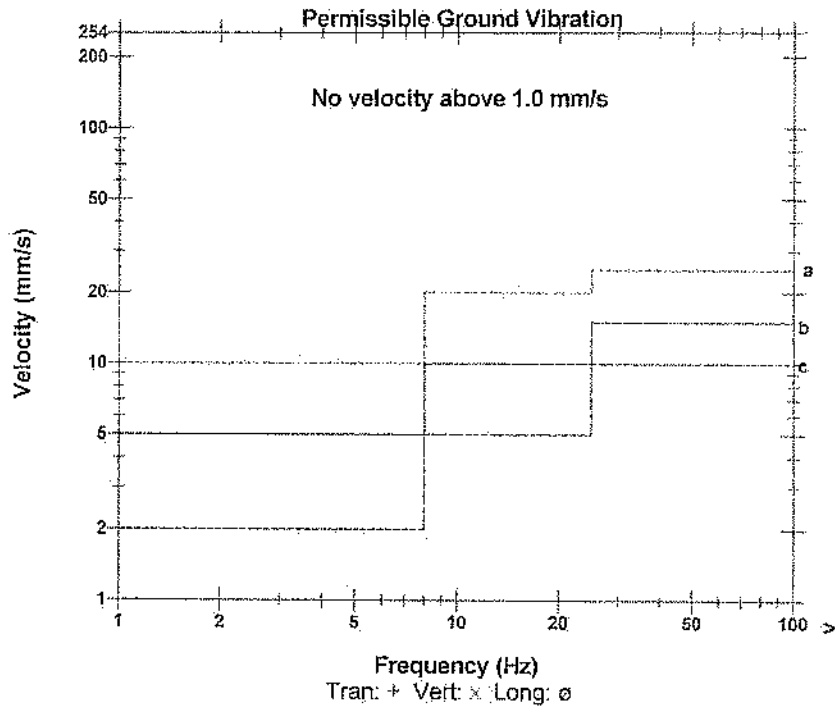
Location: KATAMATI P-1RL-702
 Client: TATA STEEL-KATAMATI IRON MINE
 User Name: SOLAR INDUSTRIES INDIA LTD.
 General: KATAMATI IRON MINE

Microphone Linear Weighting
 PSPL <88 dB(L)
 ZC Freq 2.3 Hz
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

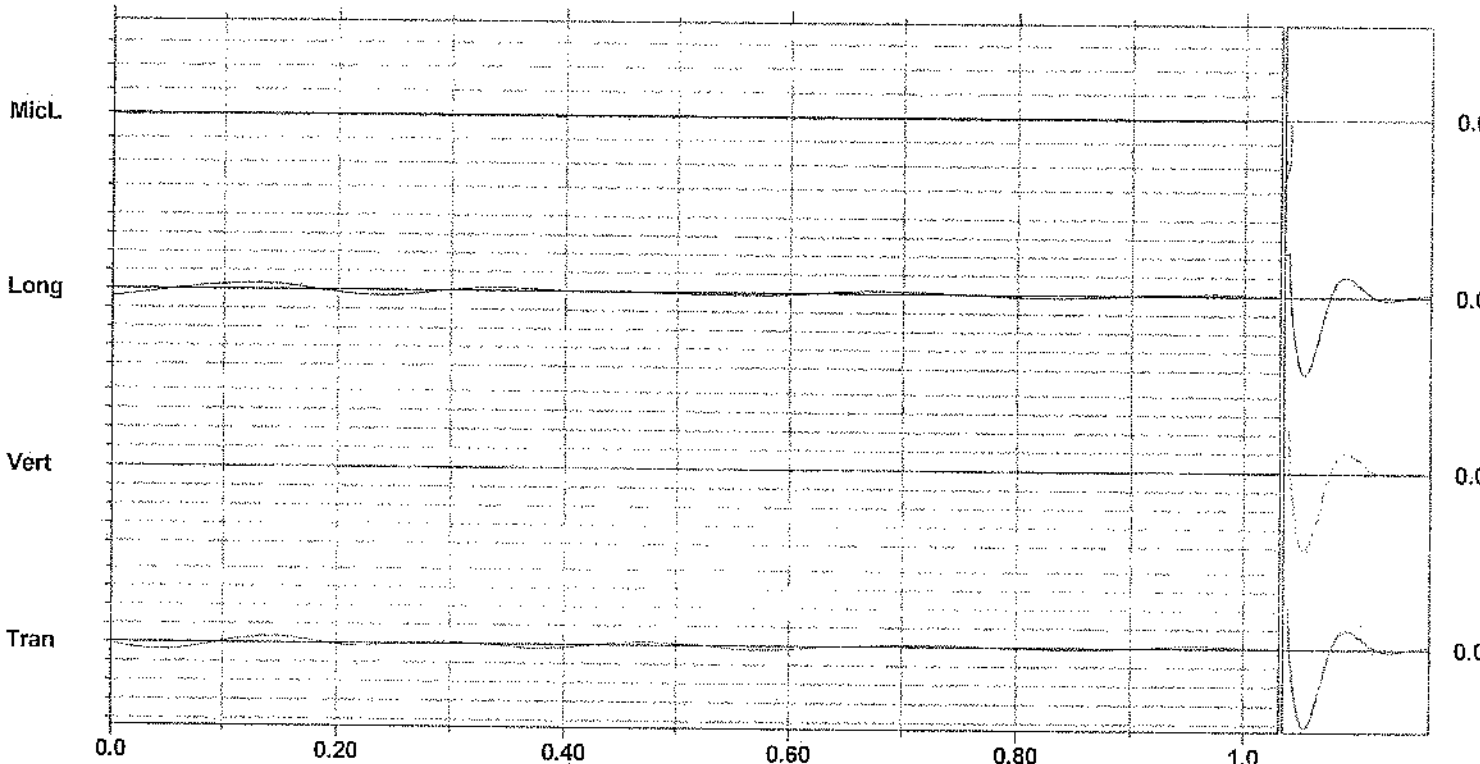
	Tran	Vert	Long	
PPV	0.765	0.166	0.820	mm/s
ZC Freq	5.4	6.2	9.5	Hz
Time (Rel. to Trig)	0.039	0.753	0.000	sec
Peak Acceleration	0.008	0.008	0.010	g
Peak Displacement	0.023	0.005	0.027	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	4.1	3.9	3.9	

Peak Vector Sum 0.933 mm/s at 0.133 sec
 N/A: Not Applicable

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.10 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div

Sensor Check

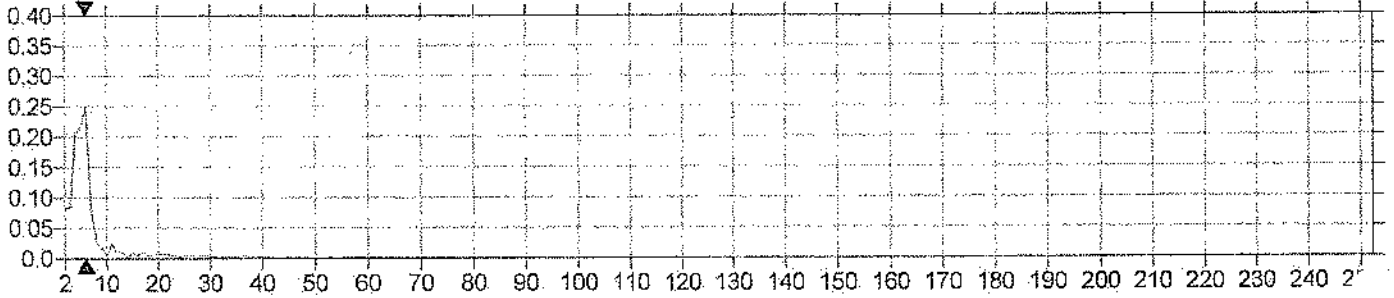
Date/Time Long at 13:52:06 February 28, 2026
Trigger Source Geo: 0.500 mm/s
Range Geo: 254.0 mm/s
Record Time 1.0 sec at 2048 sps
Operator/Setup: Operator/KATAMATI P-1 RL-702.MMB

Serial Number UM21106 V 10-90GC Micromate ISEE
Battery Level 3.6 Volts
Unit Calibration October 8, 2025 by UES New Delhi
File Name __TEMP.EVT

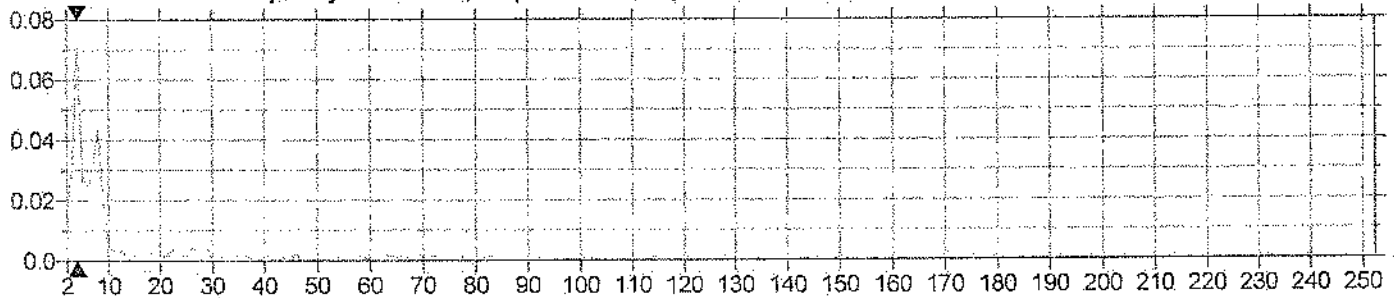
Notes

Location: KATAMATI P-1RL-702
Client: TATA STEEL-KATAMATI IRON MINE
User Name: SOLAR INDUSTRIES INDIA LTD
General: KATAMATI IRON MINE

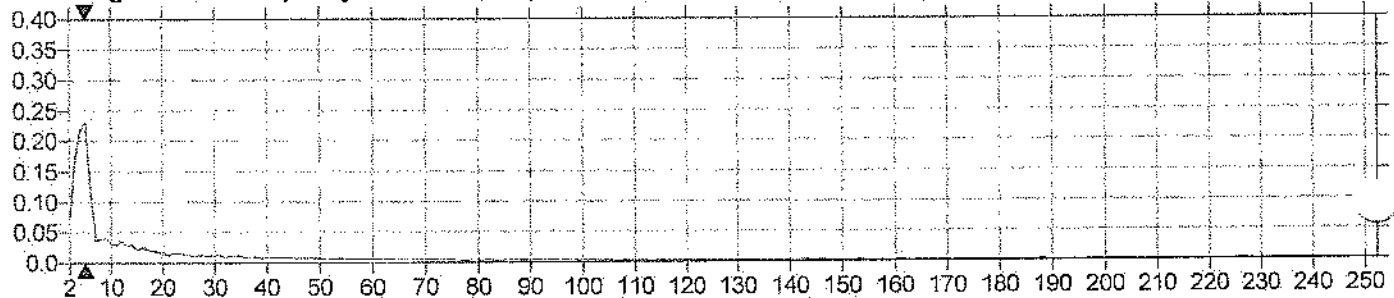
Tran Dominant Frequency = 6.000 Hz., Amplitude = 0.250, PPV from Event = 0.765 mm/s



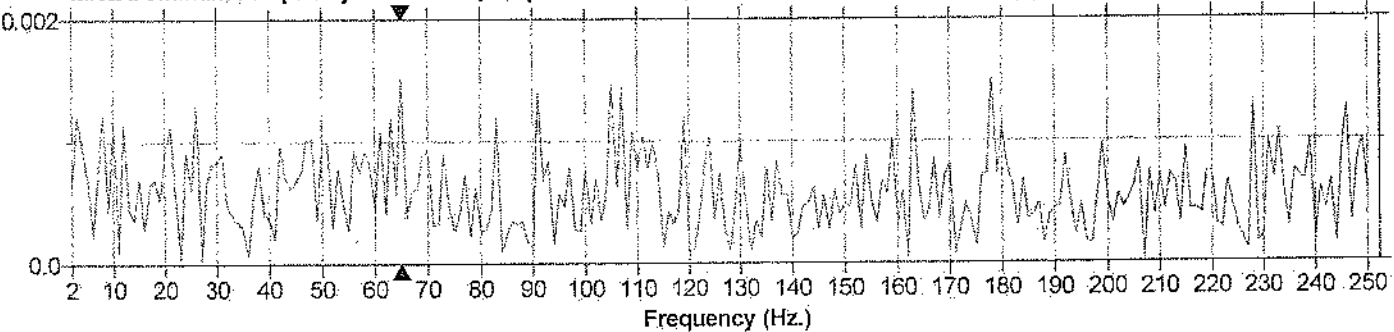
Vert Dominant Frequency = 4.000 Hz., Amplitude = 0.072, PPV from Event = 0.166 mm/s



Long Dominant Frequency = 5.000 Hz., Amplitude = 0.232, PPV from Event = 0.820 mm/s



MicL Dominant Frequency = 65.00 Hz., Amplitude = 0.002, PSPL From Event = 74.70 dB(L)



Date/Time Tran at 14:10:53 March 25, 2026
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
 Battery Level 3.8 Volts
 Unit Calibration February 25, 2026 by UES New Delhi
 File Name UM20055_20260325141053.IDFW

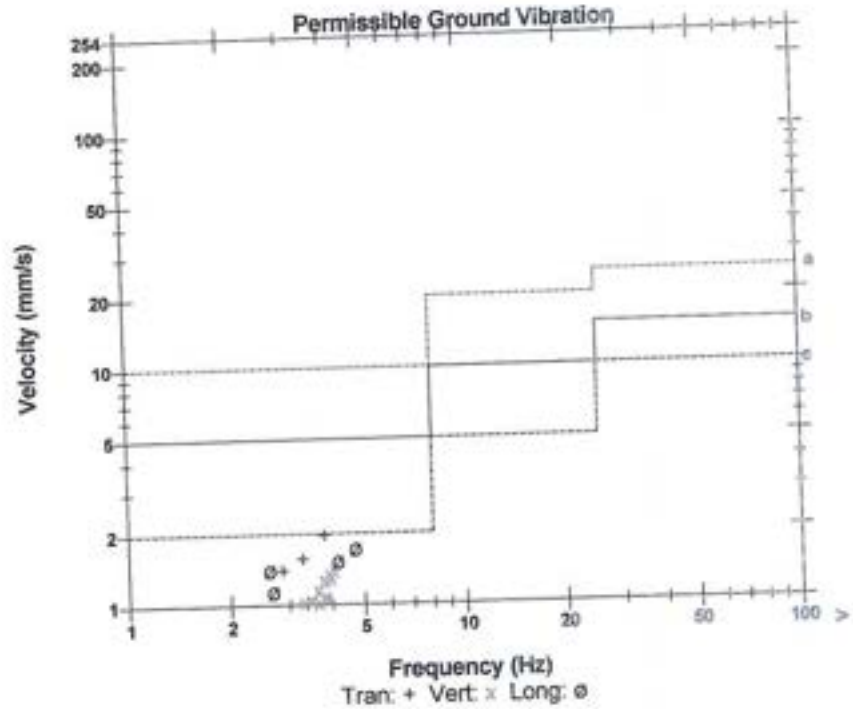
Notes
 Location: PIT - 2 RL-
 Client: M/S TATA STEEL LTD
 User Name: M/S IDL EXPLOSIVES LTD.
 General: KATAMATI IRON MINES

Microphone Linear Weighting
 PSPL <0.500 pa.(L)
 ZC Freq >200 Hz
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

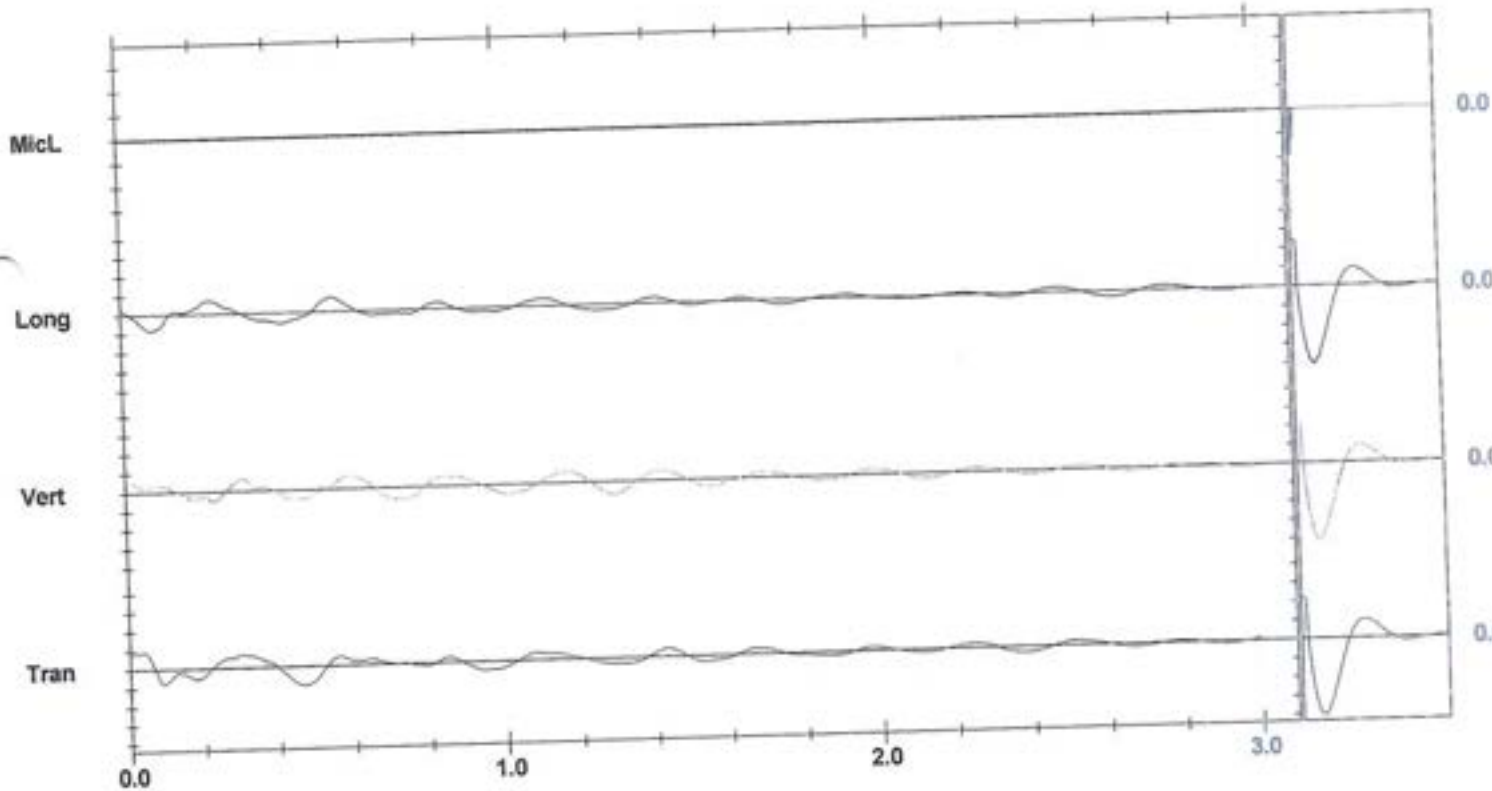
	Tran	Vert	Long	
PPV	1.955	1.395	1.726	mm/s
ZC Freq	3.8	4.1	4.7	Hz
Time (Rel. to Trig)	0.470	1.294	0.082	sec
Peak Acceleration	0.015	0.012	0.018	g
Peak Displacement	0.079	0.058	0.064	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.1	7.3	7.3	Hz
Overswing Ratio	4.2	4.6	4.5	

Peak Vector Sum 2.369 mm/s at 0.090 sec
 N/A: Not Applicable

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div

Sensor Check

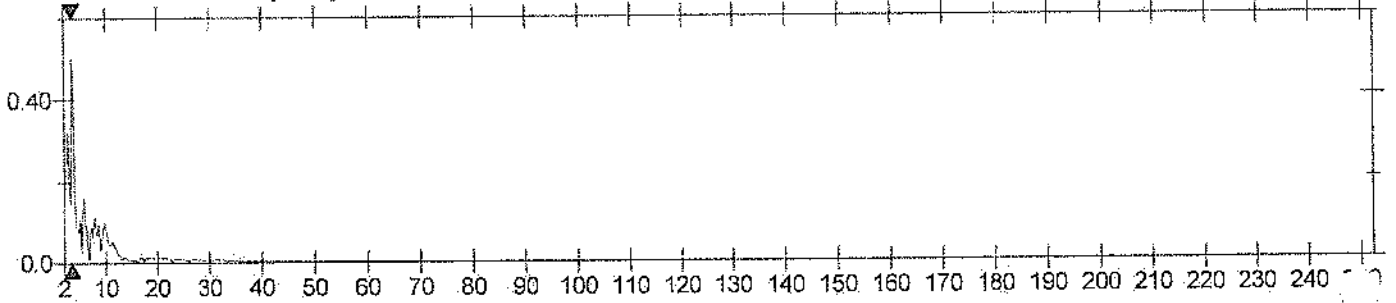
Date/Time Tran at 14:10:53 March 25, 2026
Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
Range Geo: 254.0 mm/s
Record Time 3.0 sec at 2048 sps
Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
Battery Level 3.8 Volts
Unit Calibration February 25, 2026 by UES New Delhi
File Name UM20055_20260325141053.IDFW

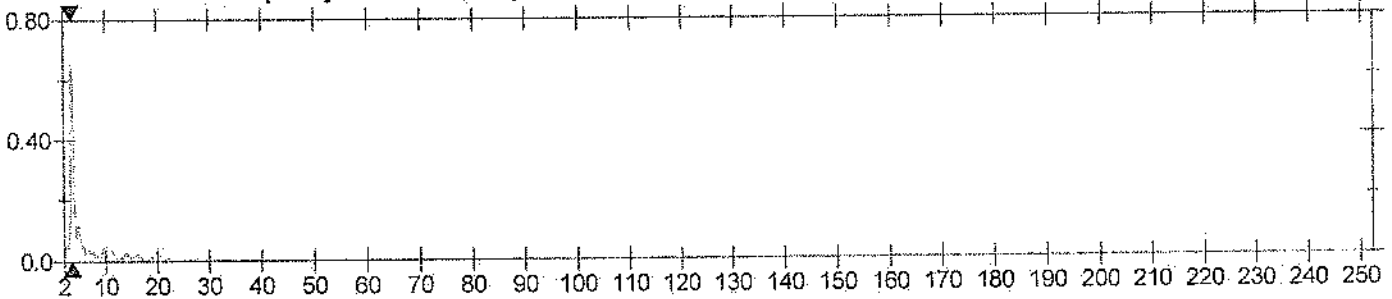
Notes

Location: PIT - 2 RL-
Client: M/S TATA STEEL LTD
User Name: M/S IDL EXPLOSIVES LTD.
General: KATAMATI IRON MINES

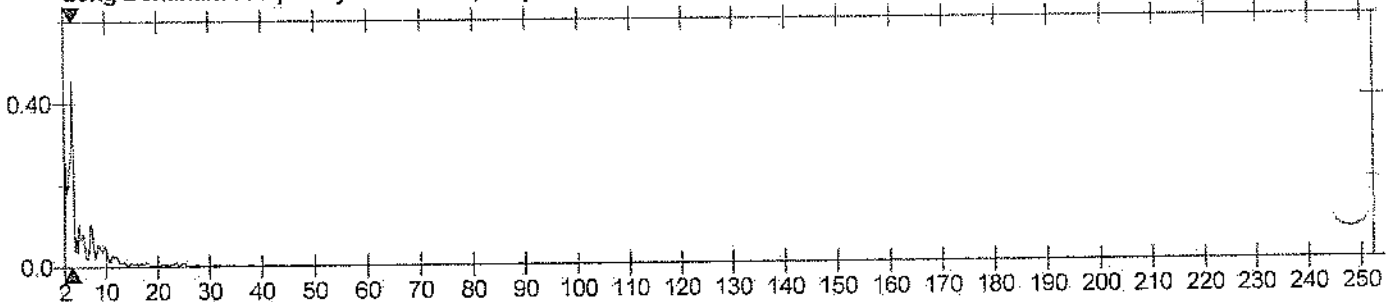
Tran Dominant Frequency = 3.500 Hz., Amplitude = 0.507, PPV from Event = 1.955 mm/s



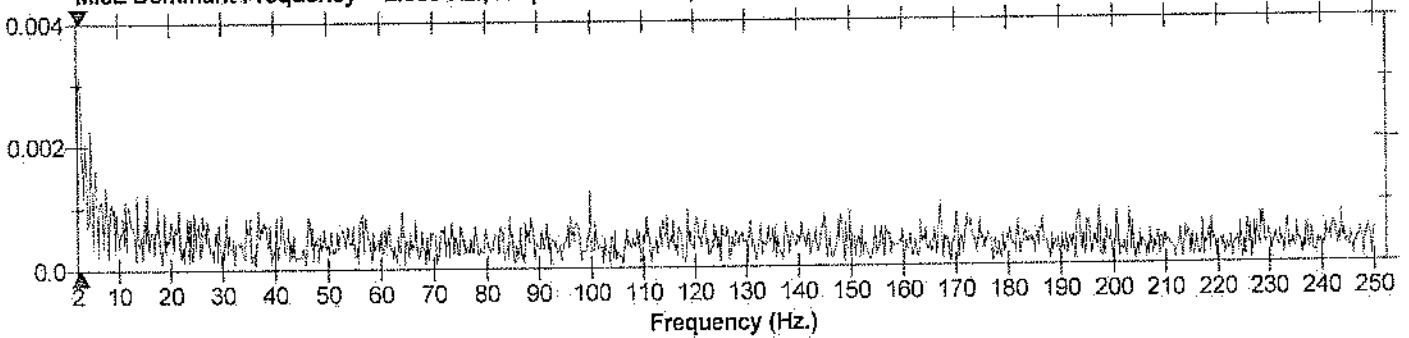
Vert Dominant Frequency = 3.500 Hz., Amplitude = 0.655, PPV from Event = 1.395 mm/s



Long Dominant Frequency = 3.500 Hz., Amplitude = 0.456, PPV from Event = 1.726 mm/s



MicL Dominant Frequency = 2.500 Hz., Amplitude = 0.003, PSPL From Event = 0.109 pa.(L)



Date/Time: Tran at 13:51:00 March 28, 2026
 Trigger Source: Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range: Geo: 254.0 mm/s
 Record Time: 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extended notes .MMB

Serial Number: UM20055 V 10-90GC Micromate ISEE
 Battery Level: 3.8 Volts
 Unit Calibration: February 25, 2026 by UES New Delhi
 File Name: UM20055_20260328135100.IDFW

Notes

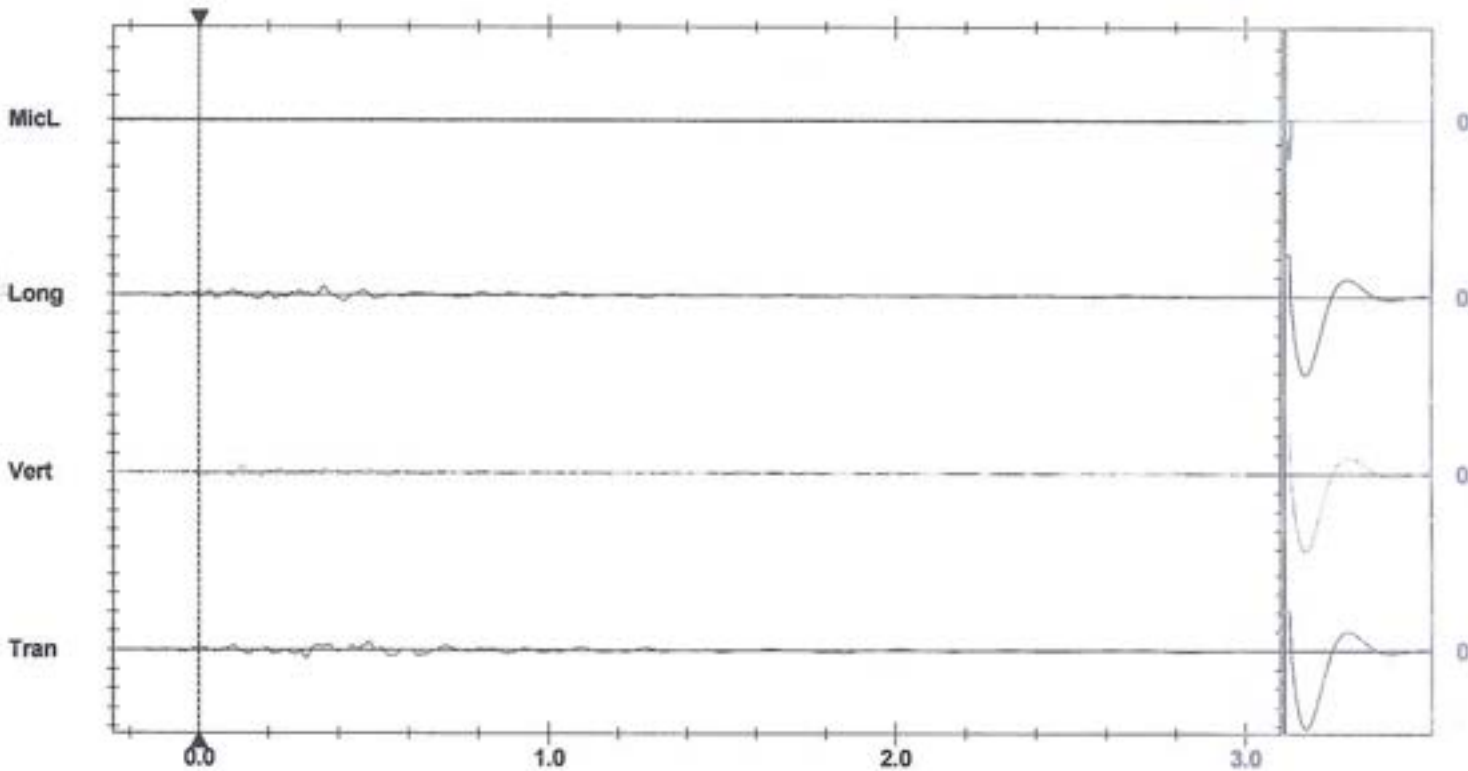
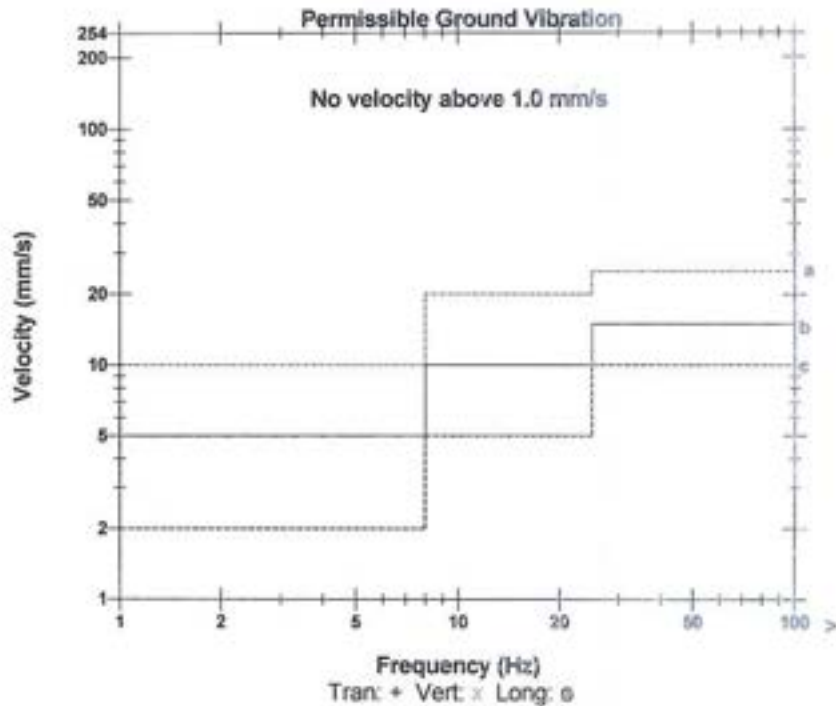
Location: RL - 678, PIT - 1, KTM
 Client: M/S TATA STEEL LTD
 User Name: M/S IDL EXPLOSIVES LTD.
 General: KATAMATI IRON MINES

Microphone: Linear Weighting
 PSPL: <0.500 pa.(L)
 ZC Freq: 114 Hz
 Channel Test: Check (Freq = 0.0 Hz Amp = 0 mv)

	Tran	Vert	Long	
PPV	0.859	0.820	0.867	mm/s
ZC Freq	7.4	19.3	10.7	Hz
Time (Rel. to Trig)	0.308	0.124	0.357	sec
Peak Acceleration	0.015	0.021	0.012	g
Peak Displacement	0.015	0.007	0.010	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.1	7.3	Hz
Overswing Ratio	4.2	4.6	4.5	

Peak Vector Sum: 1.033 mm/s at 0.359 sec
 N/A: Not Applicable

DGMS India (A)



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = $\leftarrow \rightarrow$

Sensor Check

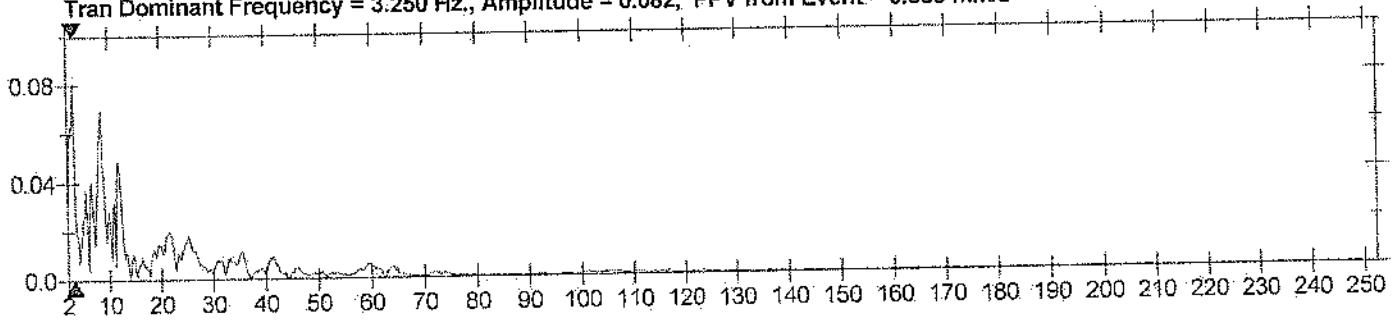
Date/Time Tran at 13:51:00 March 28, 2026
Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
Range Geo: 254.0 mm/s
Record Time 3.0 sec at 2048 sps
Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
Battery Level 3.8 Volts
Unit Calibration February 25, 2026 by UES New Delhi
File Name UM20055_20260328135100.IDFW

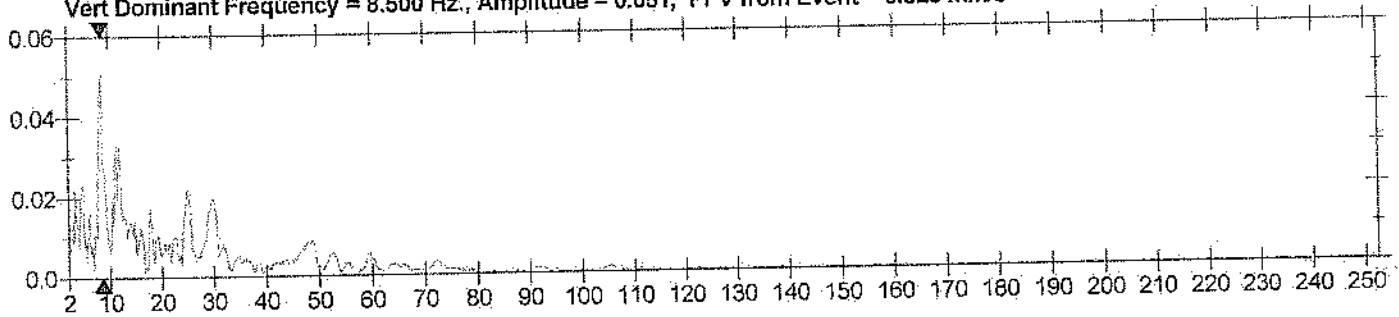
Notes

Location: RL - 678, PIT - 1, KTM
Client: M/S TATA STEEL LTD
User Name: M/S IDL EXPLOSIVES LTD.
General: KATAMATI IRON MINES

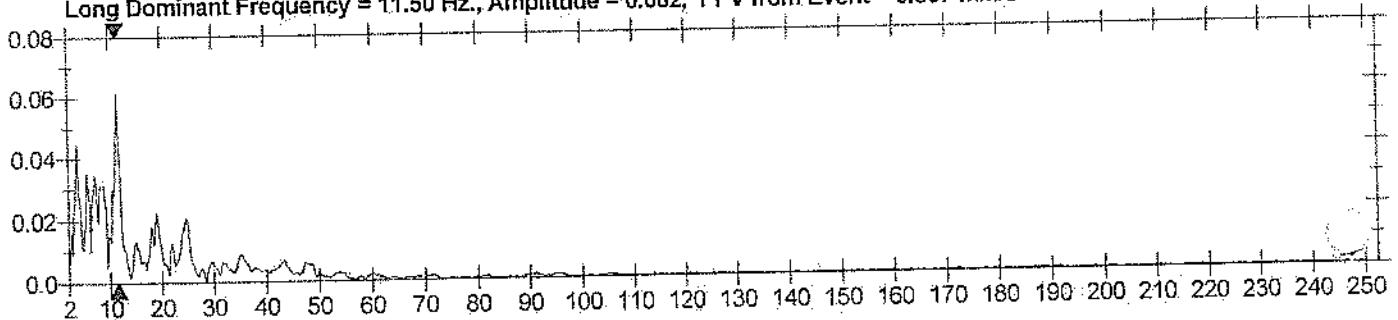
Tran Dominant Frequency = 3.250 Hz., Amplitude = 0.082, PPV from Event = 0.859 mm/s



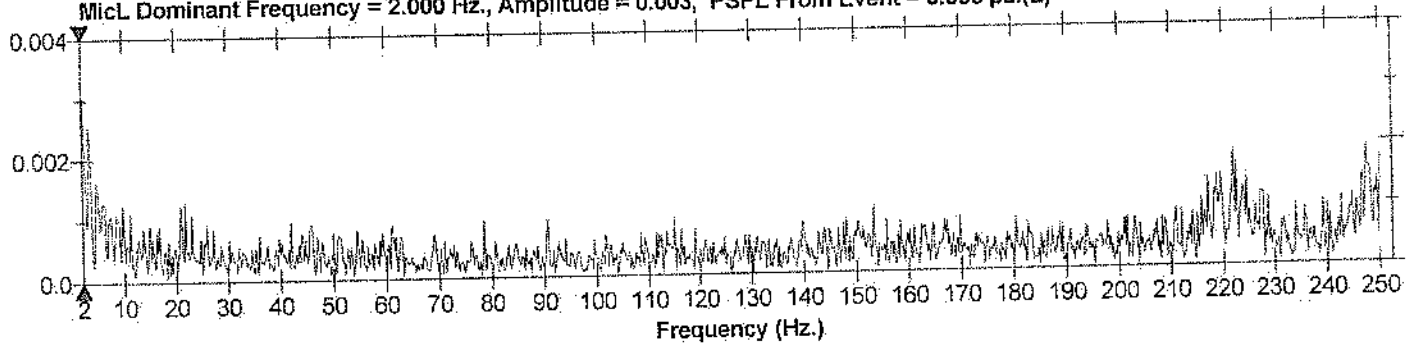
Vert Dominant Frequency = 8.500 Hz., Amplitude = 0.051, PPV from Event = 0.820 mm/s



Long Dominant Frequency = 11.50 Hz., Amplitude = 0.062, PPV from Event = 0.867 mm/s



MicL Dominant Frequency = 2.000 Hz., Amplitude = 0.003, PSPL From Event = 0.093 pa.(L)



Date/Time Tran at 14:11:53 March 30, 2026
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
 Battery Level 3.8 Volts
 Unit Calibration February 25, 2026 by UES New Delhi
 File Name UM20055_20260330141153.IDFW

Notes

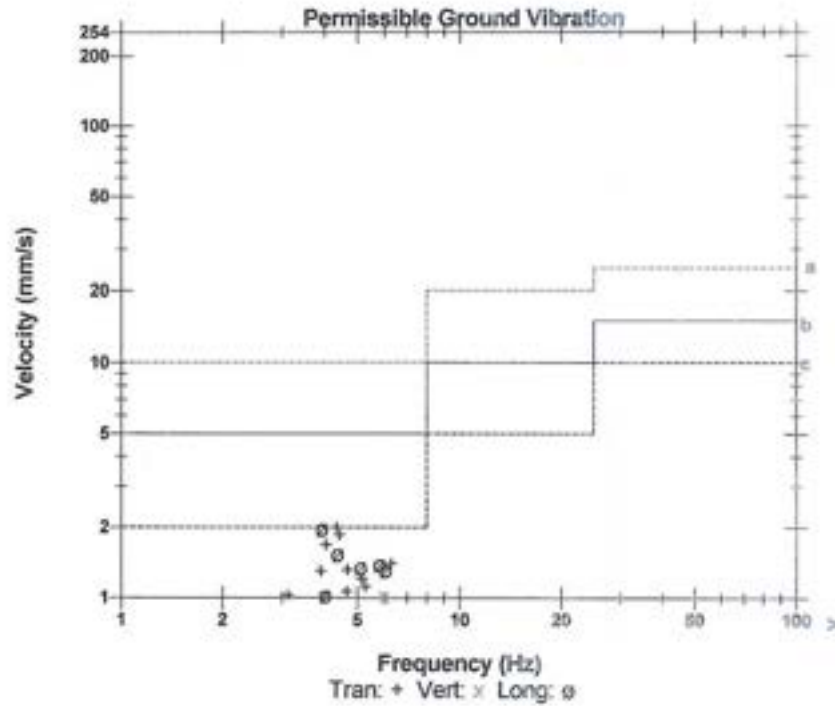
Location: RL - 704 PIT - 1, KTM
 Client: M/S TATA STEEL LTD
 User Name: M/S IDL EXPLOSIVES LTD.
 General: KATAMATI IRON MINES

Microphone Linear Weighting
 PSPL <0.500 pa.(L)
 ZC Freq >200 Hz
 Channel Test Check (Freq = 0.0 Hz Amp = 0 mv)

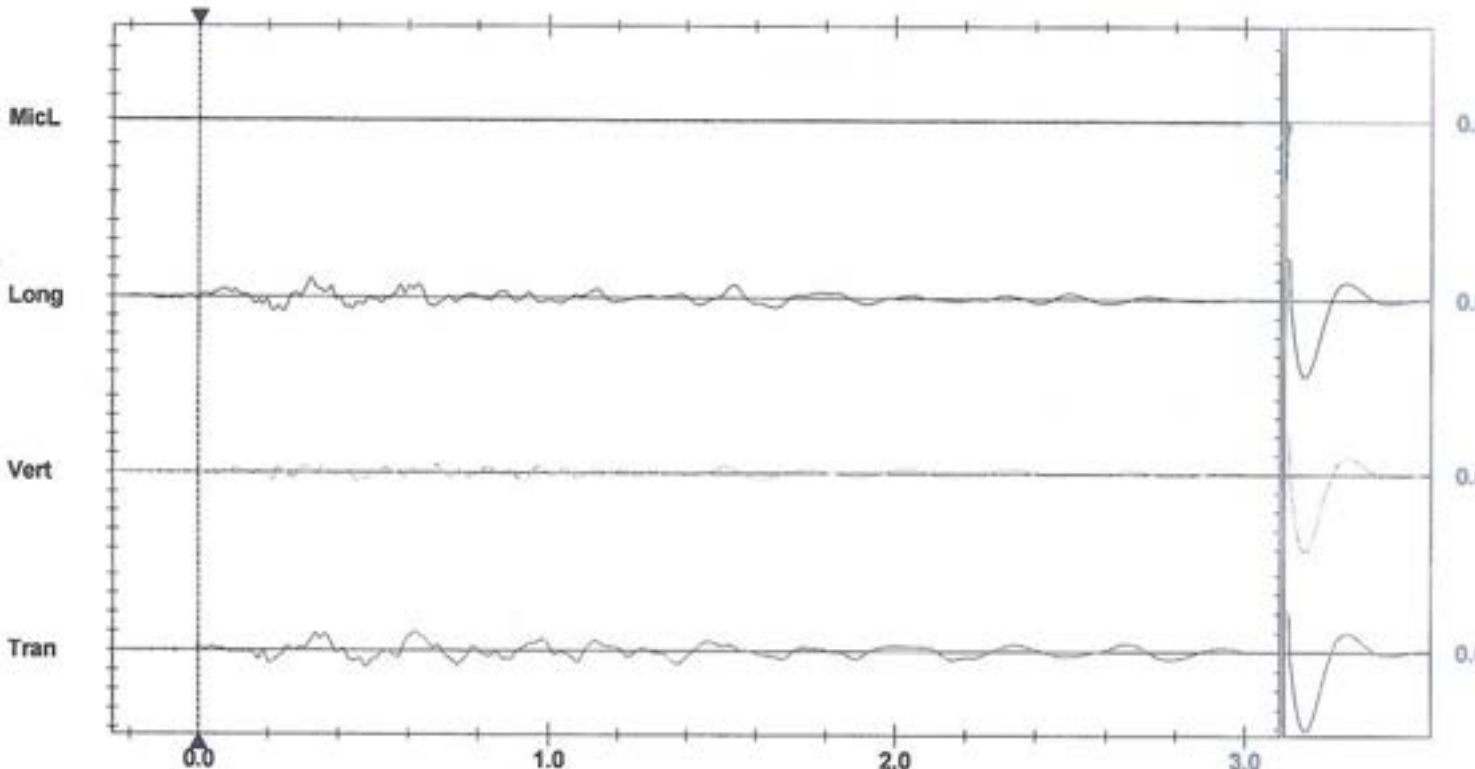
	Tran	Vert	Long	
PPV	1.994	1.017	1.970	mm/s
ZC Freq	4.3	6.0	3.9	Hz
Time (Rel. to Trig)	0.617	0.454	0.321	sec
Peak Acceleration	0.018	0.021	0.028	g
Peak Displacement	0.063	0.027	0.049	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.1	4.6	4.5	

Peak Vector Sum 2.284 mm/s at 0.323 sec
 N/A: Not Applicable

DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div
 Trigger = \blacktriangleleft

Sensor Check

Handwritten Signature
 for IDL Explosives Limited

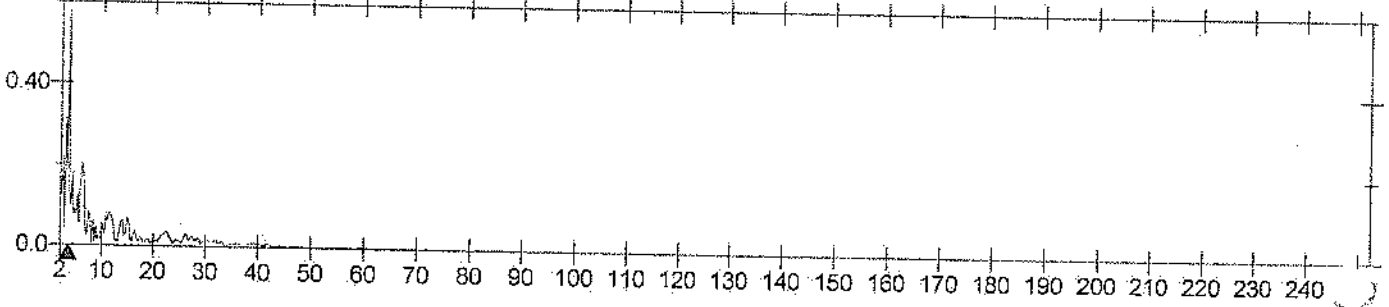
Date/Time Tran at 14:11:53 March 30, 2026
 Trigger Source Geo: 0.300 mm/s, Mic: 70.96 pa.(L)
 Range Geo: 254.0 mm/s
 Record Time 3.0 sec at 2048 sps
 Operator/Setup: Operator/Extended notes .MMB

Serial Number UM20055 V 10-90GC Micromate ISEE
 Battery Level 3.8 Volts
 Unit Calibration February 25, 2026 by UES New Delhi
 File Name UM20055_20260330141153.IDFW

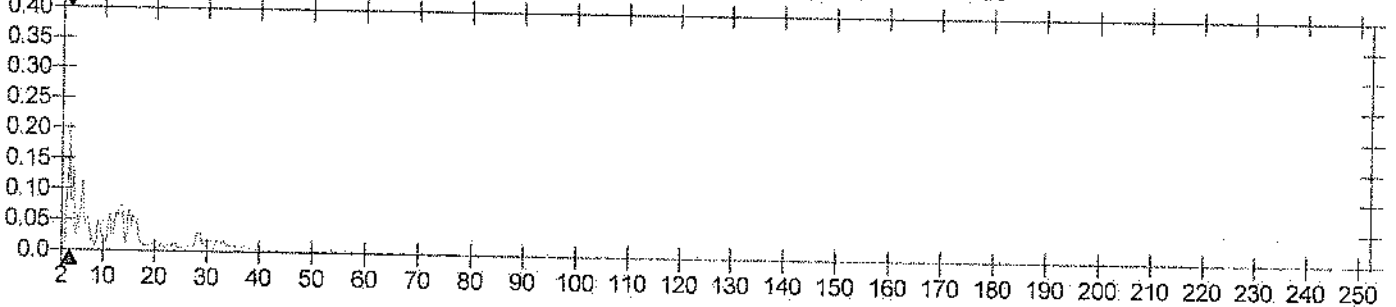
Notes

Location: RL - 702, PIT - 1, KTM
 Client: M/S TATA STEEL LTD
 User Name: M/S IDL EXPLOSIVES LTD.
 General: KATAMATI IRON MINES

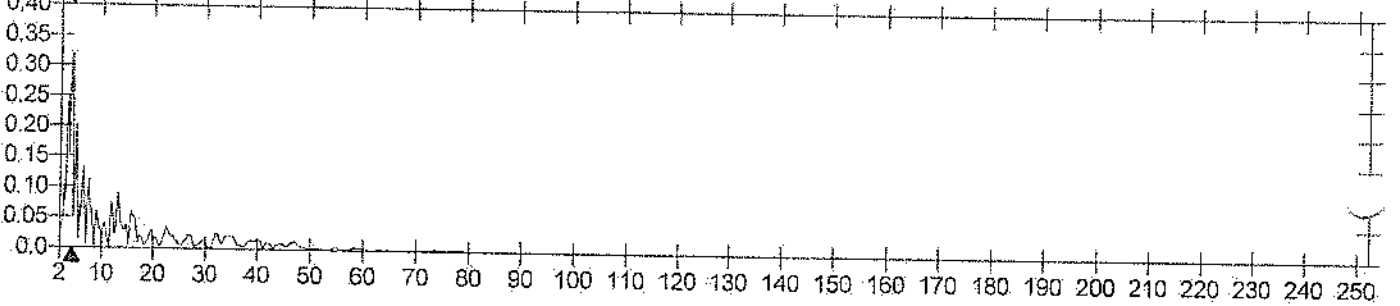
Tran Dominant Frequency = 3.500 Hz., Amplitude = 0.576, PPV from Event = 1.994 mm/s



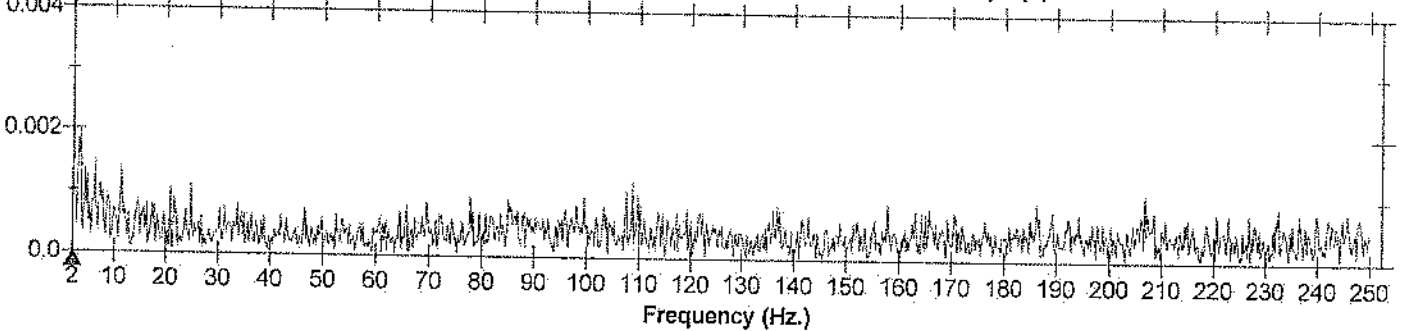
Vert Dominant Frequency = 3.500 Hz., Amplitude = 0.209, PPV from Event = 1.017 mm/s



Long Dominant Frequency = 4.250 Hz., Amplitude = 0.320, PPV from Event = 1.970 mm/s



MicL Dominant Frequency = 2.000 Hz., Amplitude = 0.003, PSPL From Event = 0.093 pa.(L)



ANNEXURE-XV

Summarised Noise Monitoring Report					
Katamati Iron Ore Mine of M/s Tata Steel Limited					
Period: October 2025 to March 2026					
Mine Location	Sampling Location	Month	Unit	Results	
				Day	Night
Katamati Iron Ore Mine	Hospital Premises	October 2025	dB(A)	56.3	38.4
		November 2025	dB(A)	43.6	39.1
		December 2025	dB(A)	47.5	38.5
		January 2026	dB(A)	42.1	35.2
		February 2026	dB(A)	45.6	33.1
		March 2026	dB(A)	42.3	35.3
	Training Centres	October 2025	dB(A)	64.2	50.8
		November 2025	dB(A)	62.9	51.6
		December 2025	dB(A)	61.9	48.2
		January 2026	dB(A)	59.5	40.63
		February 2026	dB(A)	60.8	51.3
		March 2026	dB(A)	59.7	48.3
	Township	October 2025	dB(A)	63.4	51.2
		November 2025	dB(A)	61.9	52.7
		December 2025	dB(A)	64.1	52.3
		January 2026	dB(A)	62.3	45.6
		February 2026	dB(A)	61.3	50.9
		March 2026	dB(A)	60.8	42.9
	Chief Office	October 2025	dB(A)	60.5	51.9
		November 2025	dB(A)	62.8	52.4
		December 2025	dB(A)	60.5	48.2
		January 2026	dB(A)	63.1	46.3
		February 2026	dB(A)	68.7	56.8
		March 2026	dB(A)	66.9	65.3
	Mining Area	October 2025	dB(A)	72.5	63.9
		November 2025	dB(A)	70.3	62.4
		December 2025	dB(A)	69.5	54.2
		January 2026	dB(A)	69.8	64.2
		February 2026	dB(A)	68.7	57.7
		March 2026	dB(A)	67.3	55.8
Plant Area	October 2025	dB(A)	70.2	64.9	
	November 2025	dB(A)	69.6	60.1	
	December 2025	dB(A)	72.5	58.4	
	January 2026	dB(A)	71.1	65.6	
	February 2026	dB(A)			
	March 2026	dB(A)	70.6		
Near VT Centre	October 2025	dB(A)	69.3	52.7	
	November 2025	dB(A)	66.3	51.8	
	December 2025	dB(A)	69.3	53.4	
	January 2026	dB(A)	66.3	60.1	
	February 2026	dB(A)	66.9	57.3	
	March 2026	dB(A)	68.1	56.9	

ANNEXURE-XVII

Summarised Ground Water Level Report				
Katamati Iron Ore Mine of M/s Tata Steel Limited				
Period: April 2025 to September 2025				
Month	Locations wise Ground Water Level in Mtrs. = mbmp- magl			
	Mahadev Nasha	Daladiri-1	Tata Sponge	Daladiri-2
October 2025	2.18	3.03	2.76	2.47
November 2025	2.42	3.23	3.16	2.83
December 2025	2.55	3.04	3.32	3.13
January 2026	2.46	3.15	3.01	2.70
February 2026	1.76	8.43	1.97	2.78
March 2026	1.20	7.76	1.22	2.18

ANNEXURE-XVIA

**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

Sl No.	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		October 2025			
I	Biological Testing 1. Water				
1	<i>Escherichia coli</i>	Absent	Absent	Absent	Absent
II	Chemical Testing 1. Water				
2	Alkalinity (as CaCO ₃)	152.36	162.58	158.26	171.23
3	Anionic detergent (as MBAS)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
4	Colour	BLQ (LOQ-1))	BLQ (LOQ-1))	BLQ (LOQ-1))	BLQ (LOQ-1))
5	Cyanide (as CN)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
6	Chloride (as Cl)	16.59	19.65	16.24	23.54
7	Calcium (as Ca)	30.26	24.12	36.98	41.2
8	Free residual chlorine	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
9	Fluoride (as F)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
10	Magnesium (as Mg)	8.12	9.25	10.2	13.26
11	Nitrate (as NO ₃)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)
12	Odour	Agreeable	Agreeable	Agreeable	Agreeable
13	pH	7.25	7.26	7.88	8.25
14	Phenolic compounds (as C ₆ H ₅ OH)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
15	Sulphate (as SO ₄)	8.63	6.32	10.6	10.58
16	Taste	Agreeable	Agreeable	Agreeable	Agreeable
17	Total dissolved solids	320	254	369	412
18	Turbidity	0.1	0.1	0.1	0.1
19	Total hardness (as CaCO ₃)	158	136	162	184
II	Chemical Testing 2. Residues In Water				
20	Arsenic (as As)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Aluminium (as Al)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
22	Barium (as Ba)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Boron (as B)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
24	Copper (as Cu)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
25	Cadmium (as Cd)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
26	Iron (as Fe)	0.15	0.08	0.12	0.20
27	Lead (as Pb)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
28	Manganese (as Mn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
29	Mercury (as Hg)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
30	Selenium (as Se)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
31	Total Chromium (as Cr)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
32	Zinc (as Zn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)

33	Polynuclear aromatic hydrocarbon (PAH)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
34	Mineral Oil	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)

**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

Sl No.	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		OCTOBER 2025			
II	Chemical Testing 2 . Residues In Water				
35	Pesticide Residues Organochlorine				
i	Alpha-HCH	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
ii	Beta HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iii	Gamma - HCH (Lindane)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iv	Delta- HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
v	Alachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vi	Aldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vii	Dieldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
viii	Butachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ix	p,p'-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
x	o,p'-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xi	p,p'-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xii	o,p'-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiii	o,p'- DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiv	p,p'- DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xv	Monocrotophos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvi	Atrazine	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvii	Parathion Methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xviii	Paraoxon methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xix	Malathion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xx	Malaoxon	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxi	Ethion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxii	Chlorpyrifos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxiii	Phorate	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
	Phorate-sulfone				
	Phorate-sulfoxide				

**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

SI No.	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		November 2025			
I	Biological Testing 1. Water				
1	<i>Escherichia coli</i>	Absent	Absent	Absent	Absent
II	Chemical Testing 1. Water				
2	Alkalinity (as CaCO ₃)	162.3	169.3	152.63	169.3
3	Anionic detergent (as MBAS)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
4	Colour	BLQ (LOQ-1))	BLQ (LOQ-1))	BLQ (LOQ-1))	BLQ (LOQ-1))
5	Cyanide (as CN)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
6	Chloride (as Cl)	18.25	20.36	25.12	26.58
7	Calcium (as Ca)	35.2	26.54	31.26	45.1
8	Free residual chlorine	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
9	Fluoride (as F)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
10	Magnesium (as Mg)	9.25	8.56	12.5	12.56
11	Nitrate (as NO ₃)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)
12	Odour	Agreeable	Agreeable	Agreeable	Agreeable
13	pH	7.12	7.58	7.06	7.34
14	Phenolic compounds (as C ₆ H ₅ OH)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
15	Sulphate (as SO ₄)	6.96	7.23	12.5	9.26
16	Taste	Agreeable	Agreeable	Agreeable	Agreeable
17	Total dissolved solids	298	320	342	384
18	Turbidity	0.1	0.1	0.1	0.1
19	Total hardness (as CaCO ₃)	146	142	158	178
II	Chemical Testing 2. Residues In Water				
20	Arsenic (as As)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Aluminium (as Al)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
22	Barium (as Ba)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Boron (as B)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
24	Copper (as Cu)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
25	Cadmium (as Cd)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
26	Iron (as Fe)	0.11	0.09	0.14	0.18

27	Lead (as Pb)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
28	Manganese (as Mn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
29	Mercury (as Hg)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
30	Selenium (as Se)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
31	Total Chromium (as Cr)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
32	Zinc (as Zn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
33	Polynuclear aromatic hydrocarbon (PAH)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
34	Mineral Oil	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)

**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

Sl No.	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		November 2025			
II	Chemical Testing 2 . Residues In Water				
35	Pesticide Residues Organochlorine				
i	Alpha-HCH	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
ii	Beta HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iii	Gamma - HCH (Lindane)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iv	Delta- HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
v	Alachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vi	Aldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vii	Dieldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
viii	Butachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ix	p,p'-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
x	o,p'-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xi	p,p'-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xii	o,p'-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiii	o,p'- DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiv	p,p'- DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xv	Monocrotophos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvi	Atrazine	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvii	Parathion Methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xviii	Paraoxon methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xix	Malathion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xx	Malaaxon	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxi	Ethion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxii	Chlorpyrifos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxiii	Phorate	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)

	Phorate-sulfone				
	Phorate-sulfoxide				

**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

Sl No.	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
I	Biological Testing 1. Water				
1	<i>Escherichia coli</i>	Absent	Absent	Absent	Absent
II	Chemical Testing 1. Water				
2	Alkalinity (as CaCO ₃)	165.3	175.6	165.8	177.5
3	Anionic detergent (as MBAS)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
4	Colour	BLQ (LOQ-1))	BLQ (LOQ-1))	BLQ (LOQ-1))	BLQ (LOQ-1))
5	Cyanide (as CN)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
6	Chloride (as Cl)	20.23	30.23	32.23	33.65
7	Calcium (as Ca)	39.6	31.26	40.23	48.56
8	Free residual chlorine	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
9	Fluoride (as F)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
10	Magnesium (as Mg)	12.88	21.35	16.14	16.18
11	Nitrate (as NO ₃)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)
12	Odour	Agreeable	Agreeable	Agreeable	Agreeable
13	pH	7.50	7.52	7.09	7.89
14	Phenolic compounds (as C ₆ H ₅ OH)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
15	Sulphate (as SO ₄)	9.63	7.23	19.5	13.02
16	Taste	Agreeable	Agreeable	Agreeable	Agreeable
17	Total dissolved solids	366	322	348	384
18	Turbidity	0.1	0.1	0.1	0.1
19	Total hardness (as CaCO ₃)	152	166	167	188
II	Chemical Testing 2. Residues In Water				
20	Arsenic (as As)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Aluminium (as Al)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
22	Barium (as Ba)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Boron (as B)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
24	Copper (as Cu)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
25	Cadmium (as Cd)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
26	Iron (as Fe)	0.13	0.08	0.16	0.20
27	Lead (as Pb)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
28	Manganese (as Mn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
29	Mercury (as Hg)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
30	Selenium (as Se)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
31	Total Chromium (as Cr)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
32	Zinc (as Zn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
33	Polynuclear aromatic hydrocarbon (PAH)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)

34	Mineral Oil	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
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**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

SI No.	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
II	Chemical Testing 2 . Residues In Water				
35	Pesticide Residues Organochlorine				
i	Alpha-HCH	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
ii	Beta HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iii	Gamma - HCH (Lindane)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iv	Delta- HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
v	Alachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vi	Aldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vii	Dieldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
viii	Butachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ix	p,p'-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
x	o,p'-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xi	p,p'-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xii	o,p'-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiii	o,p'- DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiv	p,p'- DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xv	Monocrotophos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvi	Atrazine	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvii	Parathion Methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xviii	Paraoxon methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xix	Malathion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xx	Malaaxon	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxi	Ethion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxii	Chlorpyrifos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxiii	Phorate	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
	Phorate-sulfone				
	Phorate-sulfoxide				

**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

Sl No.	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		January 2026			
I	Biological Testing 1. Water				
1	<i>Escherichia coli</i>	Absent	Absent	Absent	Absent
II	Chemical Testing 1. Water				
2	Alkalinity (as CaCO ₃)	178.6	177.9	167.8	154.4
3	Anionic detergent (as MBAS)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
4	Colour	1	BLQ (LOQ-1))	BLQ (LOQ-1))	BLQ (LOQ-1))
5	Cyanide (as CN)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)	BLQ (LOQ-0.005)
6	Chloride (as Cl)	42.2	39.8	38.8	30.6
7	Calcium (as Ca)	41.6	40.6	35.6	40.9
8	Free residual chlorine	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
9	Fluoride (as F)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
10	Magnesium (as Mg)	17.5	15.7	17.25	10.87
11	Nitrate (as NO ₃)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)
12	Odour	Agreeable	Agreeable	Agreeable	Agreeable
13	pH	7.89	8.05	7.55	7.8
14	Phenolic compounds (as C ₆ H ₅ OH)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
15	Sulphate (as SO ₄)	12.6	17.6	18.9	9.26
16	Taste	Agreeable	Agreeable	Agreeable	Agreeable
17	Total dissolved solids	456	450	402	354
18	Turbidity	0.1	0.1	0.1	0.1
19	Total hardness (as CaCO ₃)	176	166	160	147
II	Chemical Testing 2. Residues In Water				
20	Arsenic (as As)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Aluminium (as Al)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
22	Barium (as Ba)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Boron (as B)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
24	Copper (as Cu)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
25	Cadmium (as Cd)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
26	Iron (as Fe)	0.31	0.19	0.11	0.23
27	Lead (as Pb)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)

28	Manganese (as Mn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
29	Mercury (as Hg)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
30	Selenium (as Se)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
31	Total Chromium (as Cr)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
32	Zinc (as Zn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
33	Polynuclear aromatic hydrocarbon (PAH)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
34	Mineral Oil	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)

**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

SI No.	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		January 2026			
II	Chemical Testing 2 . Residues In Water				
35	Pesticide Residues Organochlorine				
i	Alpha-HCH	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
ii	Beta HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iii	Gamma - HCH (Lindane)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iv	Delta- HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
v	Alachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vi	Aldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vii	Dieldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
viii	Butachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ix	p,p'-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
x	o,p'-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xi	p,p'-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xii	o,p'-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiii	o,p'- DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiv	p,p'- DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xv	Monocrotophos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvi	Atrazine	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvii	Parathion Methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xviii	Paraoxon methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xix	Malathion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xx	Malaaxon	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxi	Ethion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxii	Chlorpyrifos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xxiii	Phorate	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
	Phorate-sulfone				

	Phorate-sulfoxide				
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**GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)
KATAMATI IRON MINE**

	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		February 2026			
I	Biological Testing 1.Water				
1	<i>Escherichia coli</i>	Absent	Absent	Absent	Absent
II	Biological Testing 1.Water				
2	Alkalinity (as CaCO ₃) (as MBAS)	144.28	139.30	154.23	159.20
3	Anionic surface active agents	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
4	Colour	BLQ (LOQ-1))	BLQ (LOQ-1))	BLQ (LOQ-1)	BLQ (LOQ-1)
5	Cyanide (as CN)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
6	Chloride (as Cl)	27.79	25.81	31.76	34.74
7	Calcium (as Ca)	39.28	28.06	32.06	48.20
8	Free residual chlorine	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
9	Fluoride (as F)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
10	Magnesium (as Mg)	14.12	18.99	20.45	15.10
11	Nitrate (as NO ₃)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)
12	Odour	Agreeable	Agreeable	Agreeable	Agreeable
13	pH	7.92	8.11	7.35	7.62
14	Phenolic compounds (as C ₆ H ₅ OH)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
15	Sulphate (as SO ₄)	9.12	10.2	9.1	10.9
16	Taste	Agreeable	Agreeable	Agreeable	Agreeable
17	Total dissolved solids	306	311	303	371
18	Turbidity	0.1	0.1	0.1	0.1
19	Total hardness (as CaCO ₃)	156	148	164	182
II	Chemical Testing 2. Residues In Water				
20	Arsenic (as As)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Aluminium (as Al)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
22	Barium (as Ba)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Boron (as B)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
24	Copper (as Cu)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
25	Cadmium (as Cd)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
26	Iron (as Fe)	0.55	0.55	0.85	0.56
27	Lead (as Pb)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
28	Manganese (as Mn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
29	Mercury (as Hg)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
30	Selenium (as Se)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
31	Total Chromium (as Cr)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
32	Zinc (as Zn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
33	Mineral Oil	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
34	Polynuclear aromatic hydrocarbon (PAH)				

i	Indeno(1,2,3- cd)pyrene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ii	Acenaphthene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iii	Acenaphthylene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iv	Anthracene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)

GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)

KATAMATI IRON MINE

	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
February 2026					
v	Benz(a)anthracene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vi	Benzo(a)pyrene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vii	Benzo(b)fluoranthene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
viii	Benzo(g,h,i)perylene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ix	Benzo(k)fluoranthene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
x	Chrysene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xi	Dibenz(a,h)anthracene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xii	Fluoranthene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiii	Fluorene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiv	Naphthalene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xv	Phenanthrene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvi	Pyrene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
35	Pesticide Residues Organochlorine				
i	Alachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ii	Atrazine	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iii	Aldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iv	Dieldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
v	Alpha HCH	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
vi	Beta HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vii	Butachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
viii	Chlorpyrifos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ix	Delta HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
x	2,4-Dichlorophenoxy Acetic Acid	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xi	DDT (o, p and p, p – Isomers of DDT,DDE and DDD)				
a	p,p-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
b	o,p-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
c	p,p-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
d	o,p-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
e	o,p-DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
f	p,p-DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xii	Endosulfan (alpha, beta and sulphate)				
a	Alpha Endosulfan	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
b	Beta Endosulfan	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
c	Endosulfan sulfate	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)

xiii	Ethion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ivx	Gamma HCH (Lindane)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xv	Isoproturon	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvi	Malathion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvii	Parathion methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xviii	Monocrotophos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xix	Phorate	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)

GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)

KATAMATI IRON MINE

	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		March 2026			
I	Biological Testing 1.Water				
1	<i>Escherichia coli</i>	Absent	Absent	Absent	Absent
II	Biological Testing 1.Water				
2	Alkalinity (as CaCO ₃) (as MBAS)	152.4	184.15	177.8	190.5
3	Anionic surface active agents	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
4	Colour	BLQ (LOQ-1)	BLQ (LOQ-1)	BLQ (LOQ-1)	BLQ (LOQ-1)
5	Cyanide (as CN)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
6	Chloride (as Cl)	66.52	61.59	60.12	63.56
7	Calcium (as Ca)	50.4	56.8	47.2	55.2
8	Free residual chlorine	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
9	Fluoride (as F)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
10	Magnesium (as Mg)	11.66	7.29	7.78	9.72
11	Nitrate (as NO ₃)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)	BLQ (LOQ-2)
12	Odour	Agreeable	Agreeable	Agreeable	Agreeable
13	pH	7.80	7.59	8.05	7.82
14	Phenolic compounds (as C ₆ H ₅ OH)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
15	Sulphate (as SO ₄)	17.38	18.9	11.59	18.5
16	Taste	Agreeable	Agreeable	Agreeable	Agreeable
17	Total dissolved solids	456	402	450	356
18	Turbidity	0.1	0.1	0.1	0.1
19	Total hardness (as CaCO ₃)	174	172	150	178
II	Chemical Testing 2. Residues In Water				
20	Arsenic (as As)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
21	Aluminium (as Al)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
22	Barium (as Ba)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
23	Boron (as B)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
24	Copper (as Cu)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
25	Cadmium (as Cd)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)	BLQ (LOQ-0.002)
26	Iron (as Fe)	0.22	0.21	0.22	0.29
27	Lead (as Pb)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)

28	Manganese (as Mn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
29	Mercury (as Hg)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)	BLQ (LOQ-0.001)
30	Selenium (as Se)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
31	Total Chromium (as Cr)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
32	Zinc (as Zn)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)	BLQ (LOQ-0.02)
33	Mineral Oil	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)	BLQ (LOQ-0.1)
34	Polynuclear aromatic hydrocarbon (PAH)				
i	Indeno(1,2,3- cd)pyrene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ii	Acenaphthene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iii	Acenaphthylene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iv	Anthracene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)

GROUND WATER QUALITY REPORT (OCTOBER 2025 TO MARCH 2026)

KATAMATI IRON MINE

	Parameters	Mahadev Nasha Village	Dalfiri-2 Village	Dalfiri-1 Village	Village Nr. Tata Sponge
		February 2026			
v	Benz(a)anthracene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vi	Benzo(a)pyrene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vii	Benzo(b)fluoranthene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
viii	Benzo(g,h,i)perylene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ix	Benzo(k)fluoranthene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
x	Chrysene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xi	Dibenz(a,h)anthracene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xii	Fluoranthene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiii	Fluorene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiv	Naphthalene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xv	Phenanthrene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvi	Pyrene	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
35	Pesticide Residues Organochlorine				
i	Alachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ii	Atrazine	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iii	Aldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
iv	Dieldrin	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
v	Alpha HCH	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)	BLQ (LOQ-0.01)
vi	Beta HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
vii	Butachlor	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
viii	Chlorpyrifos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ix	Delta HCH	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
x	2,4-Dichlorophenoxy Acetic Acid	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xi	DDT (o, p and p, p – Isomers of DDT, DDE and DDD)				
a	p,p-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
b	o,p-DDE	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)

c	p,p-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
d	o,p-DDD	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
e	o,p-DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
f	p,p-DDT	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xii	Endosulfan (alpha, beta and sulphate)				
a	Alpha Endosulfan	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
b	Beta Endosulfan	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
c	Endosulfan sulfate	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xiii	Ethion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
ivx	Gamma HCH (Lindane)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xv	Isoproturon	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvi	Malathion	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xvii	Parathion methyl	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xviii	Monocrotophos	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)
xix	Phorate	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)	BLQ (LOQ-0.03)

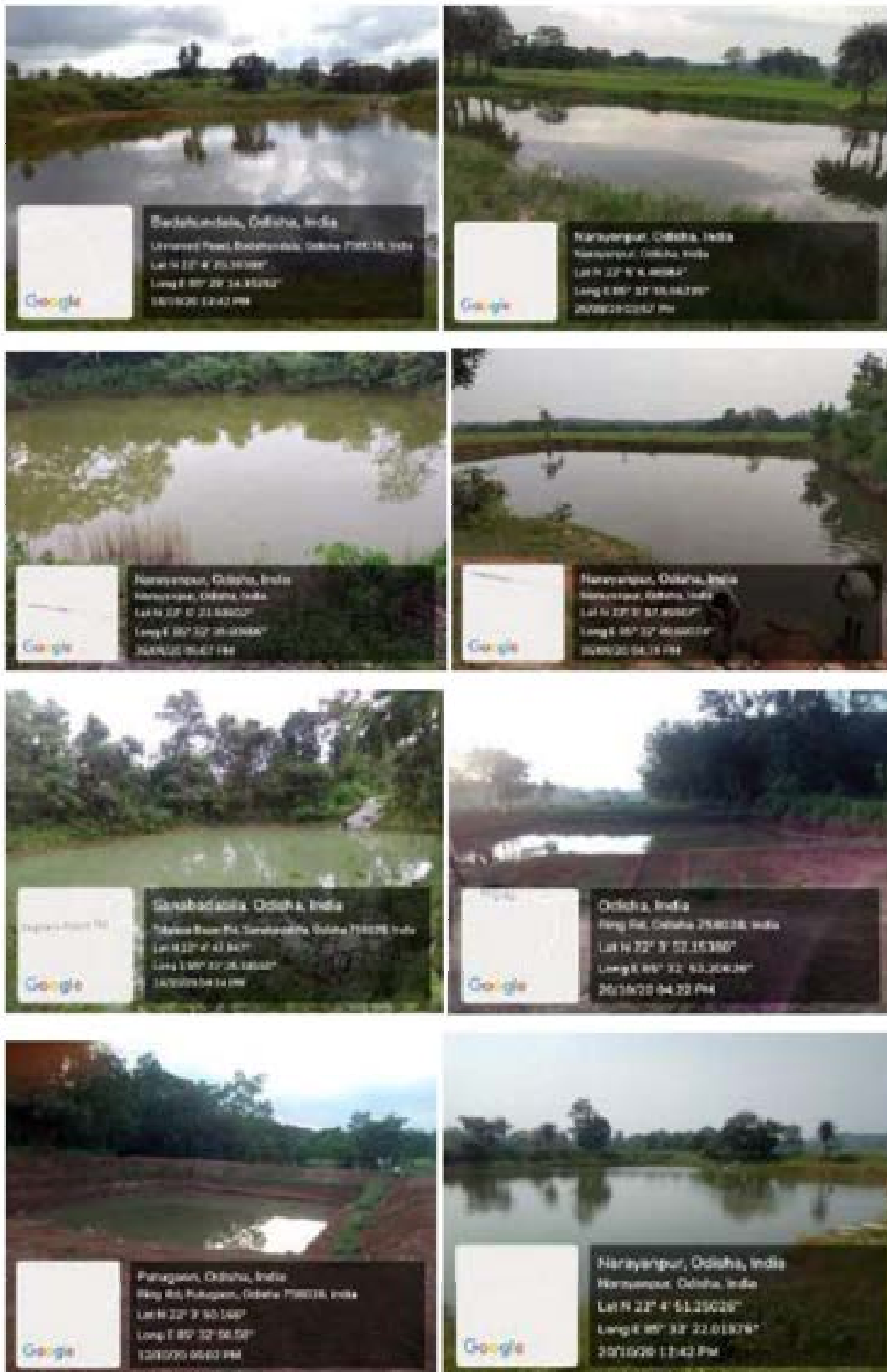


Figure 6.4: Geo-tagged photographs of recharge ponds-A.

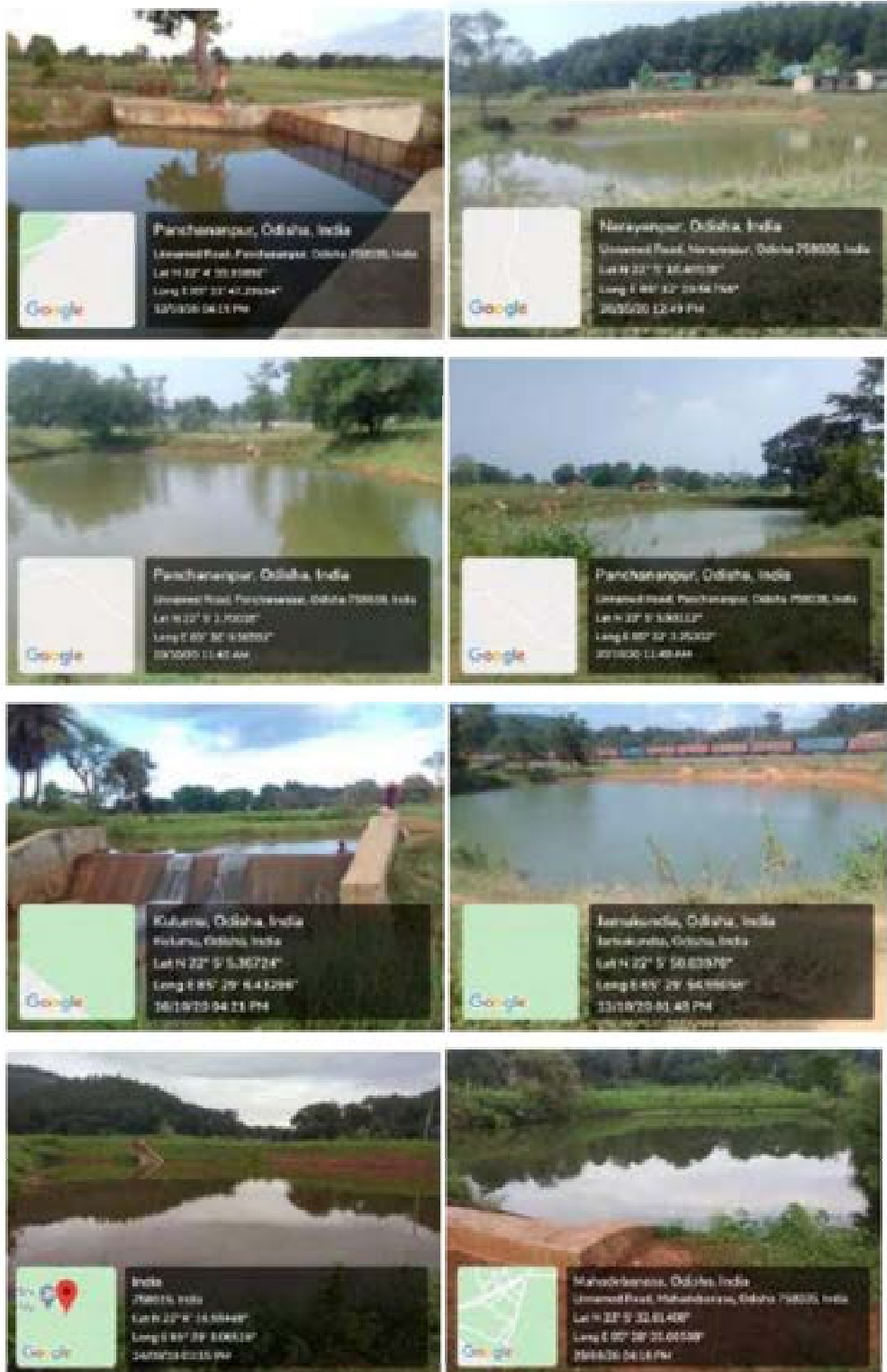


Figure 6.5: Geo-tagged photographs of recharge ponds-B.



Figure 6.6: Geo-tagged photographs of recharge ponds-C.

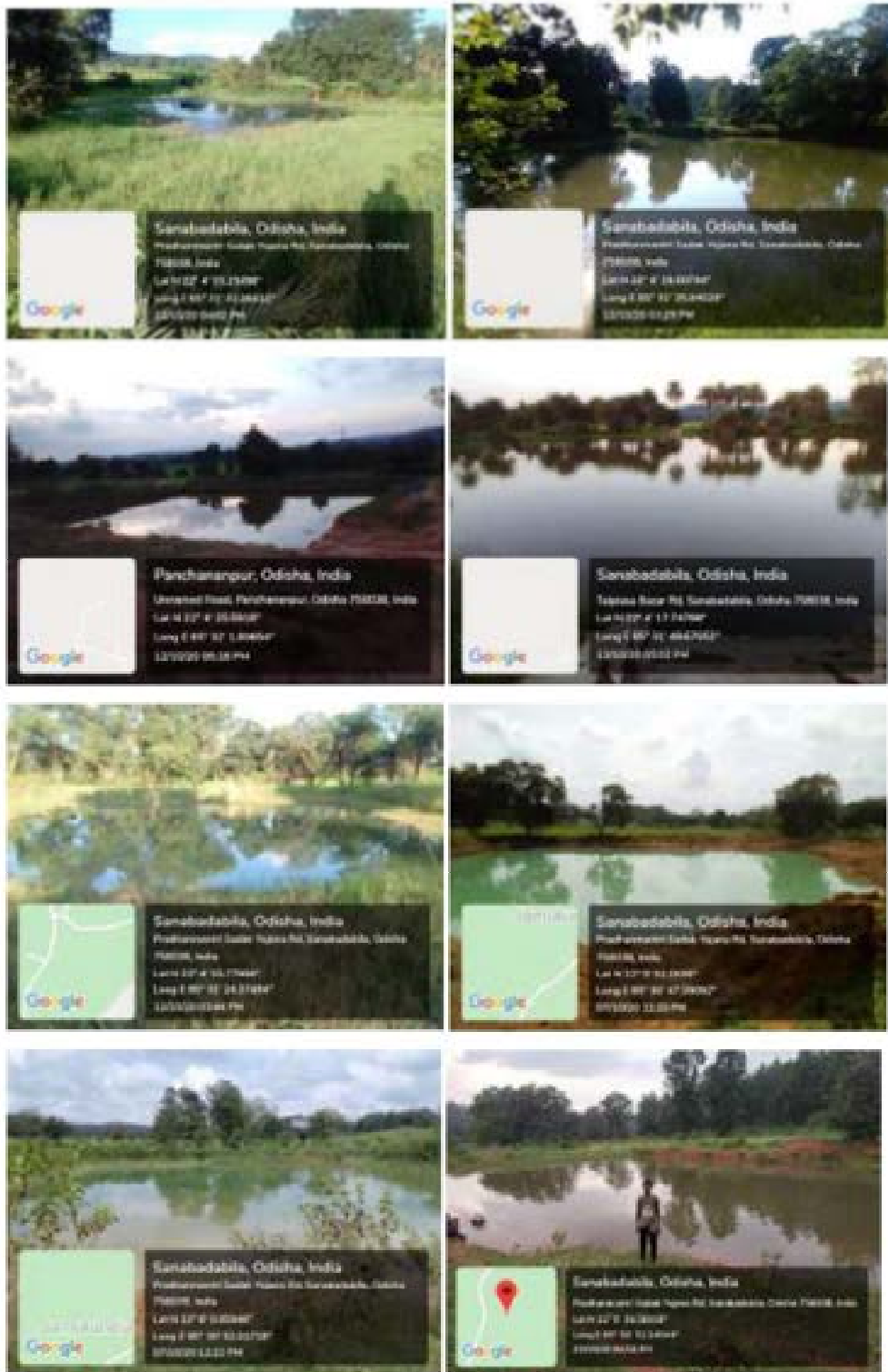


Figure 6.7: Geo-tagged photographs of recharge ponds-D.



Settling Pond



Garland Drain & retaining wall



Check Dam



**The Member Secretary
State Pollution Control Board, Odisha
Parivesh Bhawan, A/118, Nilakantha Nagar
Unit-VIII, Bhubaneswar-751012**

MD/ ENV/217/122/2025
Date: 17th June 2025

Subject: Submission of Annual Return of Hazardous Waste in the prescribed format (Form-IV), as per Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 for a period April 2024 to March 2025 of Katamati Iron Mine, M/s Tata Steel Limited.

Ref.: Hazardous Waste Authorization of Katamati Iron Mine, M/s Tata Steel Limited, vide letter no. IND-IV-HW-1099/17155, dated: 24.10.2024 valid till 31.03.2025.

Dear Sir,

Kindly find attach the Annual Return of Hazardous Waste in the prescribed format (Form-IV), as per Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 for a period April 2024 to March 2025 of Katamati Iron Mine, M/s Tata Steel Limited.

The detailed summary sheet of Hazardous waste disposal manifest (Form-10) generated from site is attached for kind information along with a copy (Annexure-1).

We trust the information furnished is in line with your requirement. Kindly acknowledge the same.

Thanking you,

Yours sincerely,
f: M/s Tata Steel Limited

Area Manager (Environment), OMQ

Encl.: As above

C.c.: Regional officer. State Pollution Control Board, Odisha, Baniapata, College Road, Keonjhar - 758 001, Odisha

TATA STEEL LIMITED

Mines Division Noamundi 833 217 India
Tel 91 9234301340 Fax 91 6596 290737

Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001 India
Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

FORM-4

[See rules 6(5), 13(8), 16(6) and 20(2)]

FORM FOR FILLING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30th day of June of every year for the preceding period April to March]

1. Name and address of facility : Katamati Iron Mine, Tata Steel Ltd.,
P.O: Deojhar, Dist.: Keonjhar,
Odisha
2. Authorisation No. and Date of issue: IND-IV-HW-1099/17155 dated 24.10.2024 valid
till 31.03.2025.
3. Name of the authorized person & : Mr. Raval Akshaykumar Nileshkumar
Full address with telephone Asst. Mgr. (IBMD), OMQ Division
Tata Steel Limited, P.O: Noamundi,
Dist.: Singhbhum (West), Jharkhand
Phone: (O) : 9065515646
4. Production during the year (product wise),
Wherever applicable : Iron Ore (ROM) : 11.28 MTPA

Part A, To be filled by hazardous Waste generators

1. Total quantity of waste generated category wise
- 5.1 Used oil : Nil
- 5.2 Wastes or residues containing oil : Nil
- 9.1 Lead bearing residues : Nil
- 33.1 Ferrrous Drums /containers/
Liners, Contaminated with
Hazardous chemicals/wastes : Nil
2. Quantity dispatched
- i. To disposal facility : Nil
- ii. To re-cycler or co-processors
Or processor : Nil
- iii. Others : Nil
3. Quantity utilized in-house, if any : Nil
4. Quantity in-storage at the end of the year : Nil

Part B. To be filled by Treatment, Storage and disposal facility operators

Not Applicable

1. Total quantity received –
2. Quantity in Stock at the beginning of the year –
3. Quantity treated –
4. Quantity disposed in landfills as such and after treatment –
5. Quantity incinerated (if applicables) –
6. Quantity processed other than specified above –
7. Quantity in storage at the end of the year –

Part C. To be filled by Treatment, Storage and disposal facility operators

Not Applicable

1. Quantity of waste received during the year -
 - (i) Domestic sources
 - (ii) Imported (if applicable)
2. Quantity in Stock at the beginning of the year –
3. Quantity recycled or co-processed or used –
4. Quantity of product dispatched (wherever applicable) -
5. Quantity of waste generated –
6. Quantity of waste disposed –
7. Quantity re-exported (wherever applicable) –
8. Quantity in storage at the end of the year

Date: 13th June 2025
Place: Katamati Iron Mine,
M/s Tata Steel Limited

Signature of the Occupier or
Operator of the disposal facility



ANNEXURE-XXII**Plantation Details at Katamati Iron Mine**

Year of Plantation	Number of Plantation	Survival Rate	Location of Plantation	Area Covered	Species Planted
2025-2026	10147	92%	Waste Dump & Safety Zone & gap filling	4.074	Sal, Amaltas, Karanj, Kusum, Mahua, Baheda, Kumbhi, Kachnar, Tecoma, Neem, Shisham, Phasi, Arjun, Siris, Jarul, Sagwan, Chakundi, Chhatim, Gulmohar, Peltophorum, Peepal, Bargad, Mango, Jamun, Jack fruit, Amla, Ankool, Ambada, Bael, Ber, Dhau, Gamhar & other etc
2024-2025	11276	83%	Waste Dump & Safety Zone & gap filling	1.244	
2023-2024	3440	85%	Waste dump & Safety Zone Area	1.1696	
2022-2023	7580	87%	Waste dump & Safety Zone Area	2.638	
2021-2022	6634	86%	Waste dump & Safety Zone Area	2.282	
Total	39077	86.80%		11.4076	

27 Barsha munda

28 Karon Champiya

29 Dibakar Mamunda

30 Pulmani munda

31 ରୁରୁ ମୂଳା

32 ଶୁକ୍ରାକାଶୀକୋଳା

33 Laxmi Bentkar

34 Sama Munda.

35 Ajay Bentkar

36 ରୁରୁ ମୂଳା

37 ଅମୃତ ମୂଳା

38 sonamuki Munda.

39 Sani Munda.

40 Sangma Munda.

41 Amunda.

42 A Bentkar.

43 Anny.

45 Anny.

46 କୋକା କୋକୋ

47 ବାହୁ କୋକୋ

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Activity-10
Swachhata Abhiyan

ଆଦ୍ୟ କାର୍ଯ୍ୟ 14.8.2024 ର୍ଯ 10 ଘଣ୍ଟିକା ମଧ୍ୟାହ୍ନ
ଆମ ଗ୍ରାମର ସ୍ଵାଚ୍ଛତା ଆବିୟାନ କୁ ସମ୍ମାନ କରାଯାଉ ।
ଡଃ S.H.G ପ୍ରସାଦ 25 ଜଣ ମା ଉପସ୍ଥିତ ଥିଲେ ।

Padamabati Barik
ଶାନ୍ତି
୯୯୯୯ ୯୯୯୯ ୯୯୯୯

Sandhya Rani Dash
ଶାନ୍ତି
୯୯୯୯ ୯୯୯୯ ୯୯୯୯

- 1) Jharana Neik
- 2) Rajani Neik
- 3) Parmita Dash
- 4) Rajani Neik
- 5) Basu Basanti Neik
- 6) Padamabati Barik
- 7) Chandini Behera
- 8) Kalshalya Barik
- 9) Sujata Neik
- 10) Tapaswini Neik
- 11) Sabita Rani Gope
- 12) Kanakalata Barik
- 13) Sulochana Barik
- 14) Priyatama Behera
- 15) Renuka Mahanta
- 16) Ashrita Munda
- 17) Sushama Mahanta
- 18) Jyotskna Rani Dash
- 19) Sasmita Neik
- 20) Khageswari Gope
- 21) Pabindra Rani Dash
- 22) Trishi Munda
- 23) Anjana Neik
- 24) Sabita Neik
- 25) Punam Barik

Activity - 7 Health camp

ଆଦ୍ୟ ଚଉତିଶ - 5.1.2024 ରିକ୍ଷା 2 ଭବିକା ଶାମ୍ଭୁଜୀ ଧାମ
କେନ୍ଦ୍ରର ସମ୍ମିଳିତ ଭାବେ ସବୁ ଧାର୍ମିକ ମା' ମାନେ Health camp
କରାଯାଇଥିବାରୁ 70 ଟା S.H.G. ଗ୍ରୁପ୍ ଡୁ 150 ମା' ଉପସ୍ଥିତ ଥିବାରୁ

(1)

Padmabati Barik
କାନ୍ଧିଆ
କେନ୍ଦ୍ରର ଉପାଦେୟ ସମାଜ ମଠ

Sandhyarani Dash
କାନ୍ଧିଆ
କେନ୍ଦ୍ରର ଉପାଦେୟ ସମାଜ ମଠ

- 1) Bhanu priya Naik
- 2) Padmani Dash
- 3) Punam Barik
- 4) Sabita Naik
- 5) Anjana Naik
- 6) Trishi Munda
- 7) Pabitra Rani Dash
- 8) Khageswari Gope
- 9) Saswita Naik
- 10) Tyotshina Rani Dash
- 11) Gushama Mahanta
- 12) Tharana Naik
- 13) Ashrita Munda
- 14) Renuka Mahanta
- 15) sulochana Barik
- 16) Priyatama Behera
- 17) Saudamani Apat
- 18) Rajani Naik
- 19) Kanakalata Barik
- 20) Sabita Rani Gope
- 21) Tapaswini Naik
- 22) Sujata Naik
- 23) Kaushalya Barik
- 24) Chandini Behera
- 25) Padmabati Barik
- 26) Rajani Naik
- 27) Parmila Naik
- 28) Arati Gope
- 29) Babi Mahakud

Activity - 6 Bank Linkage camp

ଆଦ୍ୟ ତାରିଖ - 29.11.2023 ରୁ 11 ତାରିଖ ସମୟରେ ଯେଉଁ
ପଢ଼ାଳୟ ଉପସ୍ଥିତ ଦୁଇ ଶାଖାକୁ ନେଇ ଏହି କମ୍ପେନ୍ସ
ପ୍ରକଳ୍ପ କରାଗଲା । ଯେଉଁ ତାଲିକାରେ 27 ଟି S.H.G. ରୁ
65 ଜଣ S.H.G. ମାନି ଉପସ୍ଥିତ ରୁଣ୍ଡ ।

Padmani Bank
ବିଭାଗୀୟ
କେନ୍ଦ୍ରୀୟ ଶାଖା

Sandhya Rani Dash
ବିଭାଗୀୟ
କେନ୍ଦ୍ରୀୟ ଶାଖା

- 1) Bhanu Priya Naik
- 2) Padmani Dash
- 3) Penam Barik
- 4) Sabita Naik
- 5) Anjana Naik
- 6) Tirshi Munda
- 7) Pabitra Rani Das
- 8) Khageswari Gope
- 9) Sasmita Naik
- 10) Jyotshna Rani Dash
- 11) Sushama Mahanta
- 12) Jharana Naik
- 13) Ashrita Munda
- 14) Renuka Mahanta
- 15) Salochana Barik
- 16) Priyatama Behera
- 17) Soudamani Apat
- 18) Rajani Naik
- 19) Kanakalata Barik
- 20) Sabita Rani Gope
- 21) Tapaswini Naik
- 22) Sujata Naik
- 23) Kaushalya Barik
- 24) Chandini Behera
- 25) Padmabati Barik
- 26) Rajani Palee
- 27) Parmita Naik

Activity-5
Plant tion Awareness

ଆମର ତାରିଖ - 28-10-2023 ରିଷ ଦିନ 10 ଘଟିକା ସମୟରେ
ଆମ ଚଳେଇର ପାଠ୍ୟପୁସ୍ତକ ଅଧ୍ୟାୟରେ ଉ ସବୁ CLFରେ ଚାଲି
ଲଗାଇବାକୁ କାର୍ଯ୍ୟ କ୍ରମ କରାଗଲା । ପ.ଠ. 5.H.6.1 ର 15 ଖଣ୍ଡ
ପଢ଼ାଯାଇ ଥିଲା ।

Padmabati Barik
ଶିକ୍ଷକ
ଶିକ୍ଷକ ପଦାଧିକାରୀ

Sandhya Dash
ଶିକ୍ଷକ
ଶିକ୍ଷକ ପଦାଧିକାରୀ

- 1) Kausalya Barik
- 2) Sujata Naik
- 3) Tapaswini Naik
- 4) Sabita Rani Gope
- 5) Kanakalata Barik
- 6) Rajani Naik
- 7) Soudamini Apat
- 8) Priyatama Behera
- 9) Sulochana Barik
- 10) Renuka M. Mahanta
- 11) Ashrita Munda
- 12) Jharna Naik
- 13) Sushama Mahanta
- 14) Tirshi Munda
- 15) Anjana Naik
- 16) Padmani Dash
- 17) Bhanu Priya Naik
- 18) Purnam Barik

Activity - 3

Swachhata Arhiyan

ଆଜ୍ଞା ଚାରିଆ - ୨. 10 - 2023 ଦିନ ଆଜ୍ଞା ଚାରିଆର ପ୍ରାଥମିକ ଶ୍ରେଣୀର
 ଶୁକ୍ଳ ଚାରିଆ ପଢ଼ାଯାଇ କାର୍ଯ୍ୟ 'ଆଜ୍ଞା ଚାରିଆର ପ୍ରାଥମିକ ଶ୍ରେଣୀର
 CLF ର S.H. ଡାକ୍ତର କଲିକ କଲିକ S.H. ଡାକ୍ତର ମା' ଉପସ୍ଥିତ ରୁଗଣ
 Total - 35 ଜଣ ଶିକ୍ଷା ଶୁଗଳ ।

- | | |
|-----------------------|------------------|
| 1) Kadambini Naik | 32) Rena Dash |
| 2) Jaxmi Munda | 33) Mamata Dash |
| 3) Sujata Naik | 34) Sugandha Das |
| 4) Banabasi Naik | 35) Tikli Das |
| 5) Rebaati Naik | |
| 6) Sukanti Munda | |
| 7) Banita Behera | |
| 8) Manju Munda | |
| 9) Sabita Rani Gope | |
| 10) Shirani Mahakud | |
| 11) Dasami Mahakud | |
| 12) Lavmi Priya Gope | |
| 13) Malabati Barik | |
| 14) Chandini Behera | |
| 15) Rajani Palei | |
| 16) Rajani Naik | |
| 17) Kankalata Barik | |
| 18) Punam Barik | |
| 19) Padmabati Barik | |
| 20) Saraswati Naik | |
| 21) Sukanti Naik | |
| 22) Sumita Rani Gope | |
| 23) Pabitra Rani Dash | |
| 24) Padmini Dash | |
| 25) Jyotsna Rani Dash | |
| 26) Sushma Mahanta | |
| 27) Soudamani Mahanta | |
| 28) Ashrita Munda | |
| 29) Kaushalya Barik | |
| 30) Ranjita Naik | |
| 31) Tapaswani Naik | |

Padrabati Barik Sandhyarani Dash
 ଶିକ୍ଷକା ଶିକ୍ଷକା
 ଶିକ୍ଷକା ଶିକ୍ଷକା

Activity - 3

Swachhata Arhiyan

ଆରମ୍ଭ ତାରିଖ - 2.10.2023 ଦ୍ଵିତୀୟ ଆରମ୍ଭ ବକ୍ତବିତ୍ର ପ୍ରାମାଣିକତାକୁ
ସ୍ଵୀକୃତି ଦାଉଁଛନ୍ତି ଉପସ୍ଥାନ କାରୁ । ଆରମ୍ଭ ବକ୍ତବିତ୍ର ପ୍ରାମାଣିକତାକୁ ସମ୍ପୂର୍ଣ୍ଣ
CLFର S.H.ଜାରି କରିବା କିମ୍ପା S.H.ଜା ମାତ୍ର ଦ୍ଵାରା କରାଯାଇଥିବାର
Total - 35 ଜଣ ନାମ ରଖା ।

- 1) Kadambini Naik
 - 2) Jaxmi Munda
 - 3) Sujata Naik
 - 4) Banabasi Naik
 - 5) Rebaati Naik
 - 6) Sukanti Munda
 - 7) Banita Behera
 - 8) Manju Munda
 - 9) Sabita Rani Gope
 - 10) Shirani Mahakud
 - 11) Dasami Mahakud
 - 12) Lavmi Priya Gope
 - 13) Malabati Barik
 - 14) Chandini Behera
 - 15) Rajani Palei
 - 16) Rajani Naik
 - 17) Kankalata Barik
 - 18) Punam Barik
 - 19) Padmabati Barik
 - 20) Saraswati Naik
 - 21) Sukanti Naik
 - 22) Sumita Rani Gope
 - 23) Pabitra Rani Dash
 - 24) Padmini Dash
 - 25) Jyotsna Rani Dash
 - 26) Sushma Mahanta
 - 27) Soudamani Mahanta
 - 28) Ashrita Munda
 - 29) Kaushalya Barik
 - 30) Ranjita Naik
 - 31) Tapaswani Naik
 - 32) Rena Dash
 - 33) Mamata Dash
 - 34) Sugandha Das
 - 35) Tikli Das
- Padrabati Barik* Sandhyarani Dash
ସମ୍ପାଦକ ସମ୍ପାଦକ ସମ୍ପାଦକ ସମ୍ପାଦକ
ସମ୍ପାଦକ ସମ୍ପାଦକ ସମ୍ପାଦକ ସମ୍ପାଦକ

Activity - 1
Swachhata Abhiyan

ଆମେ ତାରିଖ 27-9-2023 ରିଖ ଦିନ 10 ଜଣିକା ସ୍ୱଚ୍ଛତା ଆମେ କଲୁଣି
କିଏ ସୁଜା ନାମିର ପାଟୁ ଏକ ସାମ୍ପୁ ତାହା ଆମେକ କିଶାଳା
ସୁଜା 7 ଟି 54.67 20 ଜଣ ମା ତପସ୍ୱିତ ପୂଜା ।

- 1) Sujata Barik
- 2) Kanakalata Barik
- 3) Rajani Naik
- 4) Sandhya Rani Dash
- 5) Padmani Dash
- 6) Punam Barik
- 7) Kaushalya Barik
- 8) Padmabati Barik
- 9) Sulochna Barik
- 10) Anjana Naik
- 11) Sujata Naik
- 12) Tapaswani Naik
- 13) Chandani Behera
- 14) Sunita Naik
- 15) Trishi Munda
- 16) Pabitra rani Dash
- 17) Sabita Naik
- 18) Bhanupriya Naik
- 19) Priyatama Behera
- 20) Renuka Mahanta

Padmabati Barik Sandhyarani Dash
ସୁଜା 7 ଟି 54.67 20 ଜଣ ମା ତପସ୍ୱିତ ପୂଜା ।

Activity - 12
Swachhata Abhiyan

ଆମର ଉଦ୍ଦେଶ୍ୟ ୧. 10-୨୦୨୫ ଶିକ୍ଷା ଦିନ 10 ଉପକା ସମୟରେ
ଆମ ଉଦ୍ଦେଶ୍ୟକୁ ପଢ଼ାଇବା ପାଇଁ ଲୋକଙ୍କୁ ସୃଷ୍ଟି କରିବା । 12 ଡି ୨ H ୧୫
୧. 30 ଦିନ ପାଇଁ ଉପକା ପଢ଼ା

Padmati Barik
ଓଡ଼ିଶା
୯୯୯୯ ୯୯୯୯ ୯୯୯୯ ୯୯୯୯

Sandhya Rani Dash
ଓଡ଼ିଶା
୯୯୯୯ ୯୯୯୯ ୯୯୯୯ ୯୯୯୯

- ① Ketan Barik Naik
- ② Fullmani Munda
- ③ Kadambini Naik
- ④ Lakmi Munda
- ⑤ Banita Behera
- ⑥ Rasmita Mahanta
- ⑦ Kanchan Barik
- ⑧ Pabitra Rani Dash
- ⑨ Jyotshna Rani Dash
- ⑩ Sabita Rani Gope
- ⑪ Ashrita Munda
- ⑫ Trishita Munda
- ⑬ Renika Mahanta
- ⑭ Padmani Dash
- ⑮ Sabita Naik
- ⑯ Bharupriya Naik
- ⑰ Priyadama Behera
- ⑱ Khageswari Gope
- ⑲ Sujata Naik
- ⑳ Chandini Behera
- ㉑ Rajani Naik
- ㉒ Rajani Pali
- ㉓ Soudamani Apot
- ㉔ Jasna Gope
- ㉕ Punam Barik
- ㉖ Sulochana Barik
- ㉗ Kanakalata Barik
- ㉘ Susmita Naik

Govt Scheme of 2024-2025

2024-2025 Govt Scheme of 2024-2025
 Name of scheme, Govt of
 Mahat number, Govt of

S.No	Name of Woman	Govt Scheme	Name of Scheme	Age	Category	Gen	Sl/B Name	Post in SNG	Sl/B Name	Group	Block Name	Mobile No
1.	Pinki Dash	Govt scheme	PMAYG	39	12th	Gen	Saibaba	Member	Gobardhan	Deolhar	Joda	7502105361
2.	Babithra Rani Das	"	"	40	12th	"	Santoshi	President	"	"	"	792502528
3.	Sandhya Rani Dash	"	"	30	12th	"	Saibaba	"	"	"	"	907831954
4.	Tikli Dash	"	Old age Pension	62	12th	"	Maatarini	"	"	"	"	774901104
5.	Kaushlya Barik	"	PMAYG	40	12th	OBC	Maatarini	"	Mahadong	"	"	993529796
6.	Punam Barik	"	"	37	10th	"	Maatarini	"	"	"	"	967117407
7.	Sabitiri Bahera	"	"	35	6th	SC	Santoshi	"	Gobardhan	"	"	89445555
8.	Ashamani Dash	"	"	49	12th	Gen	Santoshi	Member	"	"	"	97271400
9.	Rodhamani Dash	"	Subhadha Yojna	40	12th	"	Saibaba	"	"	"	"	969224106
10.	Pinki Dash	"	"	39	4th	"	Saibaba	"	"	"	"	732502528
11.	Sandhya Rani Das	"	"	30	12th	"	Maatarini	"	"	"	"	774901104
12.	Bali Dash	"	"	35	12th	"	Maatarini	"	"	"	"	774901104
13.	Kaushlya Barik	"	"	40	12th	OBC	Maatarini	President	Mahadong	"	"	993529796
14.	Punam Barik	"	"	37	10th	"	Maatarini	"	"	"	"	967117407
15.	Borsharani Dash	"	"	27	10th	Gen	Maatarini	"	Gobardhan	"	"	785622081
16.	Jyotsnarani Das	"	"	30	10th	"	Saibaba	sec	"	"	"	70010536
17.	Anita Munda	"	PMAYG	32	10th	ST	"	"	Deolhar	"	"	9556711025
18.	Anita Munda	"	"	28	10th	"	"	"	"	"	"	"
19.	Arati Naik	"	"	35	6th	"	"	"	"	"	"	"
20.	Chuma Munda	"	"	27	9th	"	"	"	"	"	"	"
21.	Dillip Munda	"	"	37	12th	"	"	"	"	"	"	"
22.	Jhina Naik	"	"	29	5th	"	"	"	"	"	"	"
23.	Suklat Purty	"	"	32	4th	"	"	"	"	"	"	"
24.	Sesmita Munda	"	"	30	9th	"	"	"	"	"	"	"
25.	Sarorini Munda	"	"	37	5th	"	"	"	"	"	"	"
26.	Meena Mahanti	"	"	41	8th	Gen	"	"	Mahadong	"	"	"



ଅଧ୍ୟାୟ ୧୦୦
ଅଧ୍ୟାୟ ତା 25.9.2024
ଆମ ଓଡ଼ିଶା ସାହିତ୍ୟ ଏକାଡେମୀ
ଭୁବନେଶ୍ୱର
ପଞ୍ଚମ ପାଠ୍ୟପୁସ୍ତକ
ଅଧ୍ୟାୟ ୧୦୦
ପଞ୍ଚମ ପାଠ୍ୟପୁସ୍ତକ
ଅଧ୍ୟାୟ ୧୦୦
ପଞ୍ଚମ ପାଠ୍ୟପୁସ୍ତକ

କାର୍ଯ୍ୟକ୍ରମ :-
୧) ଉପାଦାନ ଉତ୍କଳ ସାହିତ୍ୟ ଗାନ ।
୨) ଉପାଦାନ ଓ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୩) ଉପାଦାନ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୪) ଉପାଦାନ ସମ୍ପର୍କ ସମ୍ବନ୍ଧୀୟ ପଠନ ।

ଅଧ୍ୟାୟ ୧୦୧ :-
୧) ଉପାଦାନ ଉତ୍କଳ ସାହିତ୍ୟ ଗାନ ।
୨) ଉପାଦାନ ଓ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୩) ଉପାଦାନ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୪) ଉପାଦାନ ସମ୍ପର୍କ ସମ୍ବନ୍ଧୀୟ ପଠନ ।

ଅଧ୍ୟାୟ ୧୦୨ :-
୧) ଉପାଦାନ ଉତ୍କଳ ସାହିତ୍ୟ ଗାନ ।
୨) ଉପାଦାନ ଓ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୩) ଉପାଦାନ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୪) ଉପାଦାନ ସମ୍ପର୍କ ସମ୍ବନ୍ଧୀୟ ପଠନ ।

ଅଧ୍ୟାୟ ୧୦୩ :-
୧) ଉପାଦାନ ଉତ୍କଳ ସାହିତ୍ୟ ଗାନ ।
୨) ଉପାଦାନ ଓ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୩) ଉପାଦାନ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୪) ଉପାଦାନ ସମ୍ପର୍କ ସମ୍ବନ୍ଧୀୟ ପଠନ ।

ଅଧ୍ୟାୟ ୧୦୪ :-
୧) ଉପାଦାନ ଉତ୍କଳ ସାହିତ୍ୟ ଗାନ ।
୨) ଉପାଦାନ ଓ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୩) ଉପାଦାନ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୪) ଉପାଦାନ ସମ୍ପର୍କ ସମ୍ବନ୍ଧୀୟ ପଠନ ।

ଅଧ୍ୟାୟ ୧୦୫ :-
୧) ଉପାଦାନ ଉତ୍କଳ ସାହିତ୍ୟ ଗାନ ।
୨) ଉପାଦାନ ଓ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୩) ଉପାଦାନ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୪) ଉପାଦାନ ସମ୍ପର୍କ ସମ୍ବନ୍ଧୀୟ ପଠନ ।

ଅଧ୍ୟାୟ ୧୦୬ :-
୧) ଉପାଦାନ ଉତ୍କଳ ସାହିତ୍ୟ ଗାନ ।
୨) ଉପାଦାନ ଓ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୩) ଉପାଦାନ ଲିଂକେଜ୍ ସମ୍ପର୍କ ।
୪) ଉପାଦାନ ସମ୍ପର୍କ ସମ୍ବନ୍ଧୀୟ ପଠନ ।

ପ୍ରସାବନା - ୫ - ତାରିଖ 25.7.24 ଦିନ ମାଉସିକା ସମାଜରେ
ଏକ ସମସ୍ତ MBK CRP କୋର୍ଡ୍ ଓ ଇଲେକ୍ଟ୍ରୋନିକ୍ସରେ
ମାଉସିକା ସମାଜର TSF କର୍ମକ୍ରମୀ ଗ୍ରାହଣ କରାଯିବ
ହେଉଥିବ ।

ଆଜ୍ଞାପନ କରାଯାଉଛି ଯେ ଗୋଟିଏ TSF ଉପରେ
Ansekala ନି.ପ.ରେ ଏକ କର୍ମକ୍ରମୀ ଗ୍ରହଣ କରାଯିବ
କାରଣ । ଏହା ମାଉସିକା ସମାଜର Ansekala
ନି.ପ.ରେ କରାଯିବ । ଏହା ଏକ member ଶାନ୍ତି
କୋର୍ଡ୍ ଗ୍ରହଣ । ହାତୀ ସମାଜର CLF ଓ ନିର୍ଦ୍ଦେଶାଳୀ
SHN କୁ ସେବାପାତ୍ରୀ ନିର୍ଦ୍ଦେଶ ଦିଆଯିବ ।
ଏହା ଏକାନ୍ତେ ଟାଟା ଟାଣ୍ଡର କର୍ମକ୍ରମୀ ଶାନ୍ତି ଓ
ଏହା ଏକ ନିର୍ଦ୍ଦେଶାଳୀ SHN କୁ ସେବାପାତ୍ରୀ ହେଉଥିବ ।

ସର୍ବସାଧାରଣ ସମାଜରେ ଆଜ୍ଞାପନ ଦେଇ ପଢ଼ା ଗ୍ରହଣ
କରାଯାଉ ।

Rena Mahapatra

Sabitra Naik
Secretary
Ansekala G.P.L.F.
Ansekala

Rajani Mahapatra
President
Ansekala G.P.L.F.
Ansekala

ପଦ୍ମିନୀ ବେହେରା (MBK)
ସୁଧାକରୀ (EC)
ମାଉସିକା ସମାଜର
Lalita Oraon (CRP cm)
Tapa Saini, Behera (CRP cm)

Subhadra Patra (R.P.C.M)

Meeta Mizada (CRP cm)

Chandrabati Behera (R.P.C.M)

Lipika Basik (CRP cm)

Sulochana Patra (CRP cm)

Biradi Basik (CRP cm)

Jashoda Patra (CRP) c.m

Bharaati Patra (E.C)

ଶରଣୀ ମହାପାତ୍ର (E.C)

Manaka Mahakud (E.C)

Rangobati Mahakud (E.C)

Gorojinee Behera (E.C)

Manikarani Behera (E.C)

Sumitra Purty (E.C)

Sakuntala Patra (E.C)

Chandan K. Mishra (TSA)

Kalpataaru Nayak (BPA.M.S, Joda)

Sandhya rani Dash

ଗ୍ରାମ ସଭା ବିବେକ

ସ୍ଥାନ: ଚନ୍ଦ୍ରହର ଗ୍ରାମ ନାୟାଗଡ଼

ତା-୨୨.୧୦.୨୦୨୦

ଧନାତୀ ୦୩ ୧୦ ୨୦୨୦ ରିପ ଉପରେ ୨ ଗ୍ରାମ ସଭାକୁ
 ନାୟାଗଡ଼କୁ ନି. ୧୧ ନିମ୍ନ ସମ୍ପର୍କରେ ଗ୍ରାମ
 ସଭା ବିବେକ ଧରୁଥିବା ଉପାଦାନ । ଗ୍ରାମ ସଭାକୁ
 ଗ୍ରାମ: ୨୨୩୩, ୨୨୩୩, ୨୨୩୩, ୨୨୩୩, ୨୨୩୩
 ଯାକୁ ଉପାଦାନୀ ୨୦୨୫-୨୬) ଆର୍ଥିକ ଦଳ ନିମ୍ନ
 ନାୟାଗଡ଼କୁ ଉପାଦାନୀ ଧରା ପ୍ରତିଷ୍ଠା ପ୍ରତିଷ୍ଠା
 ସମ୍ପର୍କରେ ଉପାଦାନୀ ନାୟାଗଡ଼କୁ ।

ଉପସ୍ଥିତ ସଭ୍ୟ, ସଭ୍ୟା, ନାୟାଗଡ଼କୁ ଉପାଦାନୀ ନାୟାଗଡ଼କୁ

- ୧ - Shrabha charan Naik (Sarabach)
- ୨ - Laxmi munda (P.S. munda)
- ୩ - Radakshiri Naik (Naik Sarpanch)
- ୪ - Ajay Kumar Naik (W.M-1)
- ୫ - Sunita Naik (W.M-9)
- ୬ - ବିନୟାଳୀ ନାୟକ (W.M-11)
- ୭ - Rehati Naik (ward member-2)
- ୮ - Sukumari munda (ward member-5)
- ୧୦ - Barita Behera (W.M-10)
- ୧୧ - Manju Munda
- ୧୨ - Subita Rani Gope (CRP-cm)
- ୧୩ - Shirani Mahapatra
- ୧୪ - Jasami Mahapatra
- ୧୫ - Laxmi Priya Gope
- ୧୬ - Malabati Barik
- ୧୭ - Chandini Behera
- ୧୮ - Rajani Palei (E.C)
- ୧୯ - Rajani Naik (CRP-cm)
- ୨୦ - Kanakalata Barik (CRP-cm)
- ୨୧ - Punam Barik (E.C)
- ୨୨ - Padmabati Barik (Secy G.P)
- ୨୩ - ନାୟାଗଡ଼କୁ
- ୨୪ - ପ୍ରତିଷ୍ଠା ନାୟକ

Sushmita Rani Gope

L.T. ୧୧ ଶୁକ୍ରବାର

ପ୍ରାଣ ପ୍ରାଣୀ ବିଜ୍ଞାନ

ରାଜ୍ୟପାଠ୍ୟ

Grade 10 Science

Karunakar Mohanta

ଶୁକ୍ରବାର ପାଠ୍ୟ

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

ଜୀବନୀୟ ଶକ୍ତି

Samabasi Naik

L.T.5 ^{ଅଧ୍ୟକ୍ଷ} ଦାଞ୍ଜ

L.T.1 ମେଣ୍ଟାଠା ଦାଞ୍ଜ

L.T.1 ସୁନିତ୍ରା ଦାଞ୍ଜ

L.T.2 ଗୋପାକାଶୀ ପଦ୍ମକୃତ

L.T.1 ଦାନ ସ୍ତୂତ୍ୟ

ସ୍ତୂତାତା ଦାଞ୍ଜ

ସ୍ତୂତ୍ୟ ଦାଞ୍ଜ

L.T.1 ବିନା ଦାଞ୍ଜ

ପଞ୍ଚୁଳୀ ପଦ୍ମକୃତ

Sushanta Kumar Naik (Aspine)
Labanya Naik (Aspire)

ଅଭିନୀ ପଦ୍ମକୃତ

Telasi Beik

ଗ୍ରାମ ସର୍ବ ସଂଗଠନ

ସମ୍ପର୍କ : ପେଟେଲି ଗ୍ରା.ପ. କାର୍ଯ୍ୟାଳୟ

ତା. ୨୫.11.୨୦୨୩

ପାଠା ତା. ୨୫.୧୧.୨୦୨୪ ରେ ସମ୍ପର୍କ ପତ୍ର ଉପରେ ଉଲ୍ଲେଖ କରାଯାଇଥିବା
ପ୍ରକାରେ ସମସ୍ତ କାର୍ଯ୍ୟାଳୟ, ଗୋଡ଼ା ନଂ ପୂର୍ବ ସଂଖ୍ୟା-୩୧୧୧
ତା. ୩୦/୦୧/୨୦୨୪ ରେ ଉଲ୍ଲେଖ କରାଯାଇଥିବା ଗ୍ରା.ପ. କାର୍ଯ୍ୟାଳୟରେ
ଗ୍ରା.ପ. ସର୍ବସଂଗଠନ ଗ୍ରହଣ କରିବା ପାଇଁ ଉପଯୋଗୀ ସମ୍ପର୍କରେ ଉଲ୍ଲେଖ
କରାଯାଇ ଗ୍ରାମ ସର୍ବ ସଂଗଠନ ଗଠନ କରାଯାଇଛି । ଆମକୁ ୨୦୩୦ ବର୍ଷ ପୂର୍ବ
ଗ୍ରା.ପ.ର ପରିଚାଳନା ପାଇଁ (Sustainable Development
Goals) ଧ୍ୟାନ ଦେବାକୁ ନିମ୍ନଲିଖିତ କର୍ମୀମାନଙ୍କୁ ଉପଯୋଗୀ
କରିବାକୁ ନିମ୍ନଲିଖିତ (Name)କୁ ଗ୍ରାମ ସର୍ବସଂଗଠନ କର୍ମୀ
ଗୋଟିଏ ୨୦୨୪-୨୫ରେ ସମସ୍ତ କର୍ମକାରୀଙ୍କୁ ନିମ୍ନଲିଖିତ
ଆବେଦନା କରାଯାଇଥିଲା ।



ଉପରୋକ୍ତ କର୍ମୀ/କର୍ମିଣୀ, ନିମ୍ନଲିଖିତ ପ୍ରତିପତ୍ର, ଉପଯୋଗୀ କର୍ମକାରୀ ଏବଂ
ଗ୍ରାମସର୍ବସଂଗଠନ କର୍ମୀ ।

୧. 

୨. Jami munda

୩. Radambini Naik

୪. Ramesh Kumar Naik (W.No.8)

୫. Rehati Naik (W.M-2)

୬. Kunjabihari Mahanta (PFO)

୭. Sekumati Munda - (W.M. -5)

୮. ଦେବୀଶ୍ରୀ ମାତା - (W.M-11)

୯. Sukanti Munda (W.M-4)

10. Sujata Naik (E.C.)

11. Pabitra Devi Das (E.C.)

12. Padmini Dash (CRP-CM)

13. Jyotshna Rani Dash (CRP-CM)

14. Renuka Marijari Mahanta (E.C.)

15. Sushama Mahanta (E.C.)

16. Jharkara Naik (CRP-CM)

17. Anjana Naik (E.C.)

18. Soudeemini APAT (E.C.)

19. Sulochana Barik (E.C.)

20. Ashrita Munda (E.C.)

21. Tapaswini Naik (CRP-CM)

22. Kanakalata Barik (CRP-CM)

23. Chandini Behera (E.C.)

24. Priyanka Behera (E.C.)

25. Kaushalya Barik (M.B.K.)

26. Sandhya Rani Dash (GPLF President)

27. Padmabati Barik

GPLF Secretary

ଗ୍ରାମ ସମାଜ ବିଜେକ

ସ୍ଥାନ: ଫେଡେରାଲ ଗ୍ରାମ କାର୍ଯ୍ୟାଳୟ ୦୧-୦୨-୧୦-୨୦୨୪

ଆମ ୦୧-୦୨-୧୦-୨୦୨୪ରେ ଶାନ୍ତିକରଣ ଉଦ୍ଦେଶ୍ୟରେ ଗ୍ରାମ କାର୍ଯ୍ୟାଳୟ ଠାରେ ଏକ ସୂକ୍ଷ୍ମ ଗ୍ରାମ ସମାଜ ବିଜେକ ଅଧିବେଶନ ଗ୍ରାମ ସଭାପତି ଶ୍ରୀମତୀ ଅନୁଷ୍ଠାନ ପାଇଁ କାର୍ଯ୍ୟକାରୀ କରାଯାଇଥିବାରୁ ଅନୁଷ୍ଠାନ ସଭାପତି । ଉକ୍ତ ବିଜେକରେ ଆମର ୨୦୨୪-୨୫ ଆର୍ଥକ କଳା ପ୍ରକଳ୍ପ CFC, ବ. SFC ଓ MGNREGS ର ବାର୍ଷିକ ଉପାଦାନ ପ୍ରସ୍ତୁତି ପ୍ରସଙ୍ଗରେ ବିସ୍ତୃତ ଭାବେ ଆଲୋଚନା କରାଯାଇଥିଲା । ସମସ୍ତଙ୍କ ଗଭୀର ଗୋଷ୍ଠୀରେ ସୁସ୍ଥ ମାନ ଉପରେ ବର୍ତ୍ତମାନ ଗ୍ରାମ ସମାଜ ବିଜେକର ଉଦ୍ଦେଶ୍ୟ ଉପରେ କାର୍ଯ୍ୟକାରୀ ଉପାଦାନ କରାଯାଇଛି ।

୧୦/୨/୨୪

ଉପସ୍ଥିତ ଡାକ୍ତର ସଭା/ସଭା ଏକ ଗ୍ରାମସଭାଙ୍କ ସ୍ୱାଗତ :

1. Laxminanda
2. Kadambini Naik (N.S.)
3. Kunjabihari Mohanta (PFO)
4. Biswanarjan Baidya (A.D.E.O)
5. Sekumati Munda (w.m.s)
6. Sukanti Munda (w.m-1)
7. ବନମାଳୀ ବେହେରା (w.m.11)
8. Rehati Naik (w.m-2)
9. Fulmani Munda (w.m.12)
10. Sunita Naik (w.m.9)
11. Barita Behera (w.m-10)
12. Koushalya Barik (m.Bk)
13. Sujata Naik (PESAMOBILIZAR)
14. Sebati Dehury
15. Sandhya Rani Dash (GPLF President)
16. Anjana Naik (F.C)
17. Kanakalata Barik (CRP-CM)
18. padmabati Barik (GPLF Sec)
19. padmini Dash. (CRP CM)
20. Sasmita Naik (CRP-CM)
21. Sabita Rani Gope (CRP-CM)
22. Sumi man dia (S.H.G)
23. Jyotshna Rani Dash (CRP-CM)

Ramch
Fr. Naik
dt: 02/10/2024

@BPF
Barabul Sector

24. Lepaksha Mahanta (Jindal Asha)
- 25 - Rasmita Nayak (Swasthya Sangini) (Jindal Asha)
- 26 - Lili Mahakud
- 27 Mamata Naik
- 28 ମାମତା ନାୟକ
- 29 ରମିତା ନାୟକ
- 30 Sulochana Naik
- 31 ସୁଲୋଚନା ନାୟକ
- 32 Renuka marlari mahanta
- 33 sushama Mahanta (E.C)
- 34) Jharana Naik (CRP. CM)
35. ସୁଶମା ମହାନ୍ତ
- 36 Geetanjali Mahakud
37. ସୁଜାତା ମହାକୁଡ଼
- 38 ଶାରଣା ନାୟକ
- 39 ଜ୍ୟୋତ୍ସ୍ନା ନାୟକ
40. Jagat Naik Mahakud
D. S. Rama
- 41 - Sustanta Kumar Naik (Aspine)
ସୁସନ୍ତା କୁମାର
42. ସୁଜାତା ନାୟକ
- 43 Labanga Naik (GPCM Aspine)
- 44 - Ajay Kumar Naik (w.m.-1)
- 45 - Samabadi Naik
- 46 ସମାଧିନାୟକ

ସମ୍ପୂର୍ଣ୍ଣ ଗ୍ରାମ୍ୟ ଶୁଦ୍ଧିକ ସମାପ୍ତକାରୀ ପ୍ରମୁଖ କର୍ମ ସମ୍ପୂର୍ଣ୍ଣ
ରୋଜଗା (MGNREGA) ଆୟୋଗର କାର୍ଯ୍ୟକାରୀ କଳ୍ପନା ଲାଠି ସର୍ବସମ୍ପଦ
କ୍ରମ ଲାଠି କାର୍ଯ୍ୟକାରୀ ।

ରୋଜଗା ଗ୍ରାମ୍ୟ :

1. Imp. of road from Bhakta Mahakud house to Bidya Purdy house at Gobardhanpur.
2. Imp. of road from Bhakta Behera house to Bhaja Naik house at Masuribeda Sahi.
3. Imp. of road from Tesaburu main road to Selie Munda house at Sialijoda.
4. Repairing of check dam at Berga Sahi, Sialijoda.
5. Imp. of road from Baragachha to Purna Naik house at Deojhar.
6. Imp. of road from Baragachha to Kaibala house at Daladiri Sahi, Deojhar.
7. Imp. of road from Narayana Naik house to Gora Munda house at Daladiri Sahi, Deojhar.
8. Imp. of road from Bimal Munda house to temple at Murgabeda, Deojhar.
9. Imp. of road from Bharat Naik house to Subash ch. Naik house at Mahadevnara.
10. Completion of check dam at Rabru Sahi, Mahadevnara.

11.

ରୋଜଗା ଗ୍ରାମ୍ୟ :

Const. of goal shed of individuals at Masuribeda;

1. Banabari Naik
2. Sibansath Barik
3. Bilasa Naik
4. Panka Barik
5. Karunakar Naik
6. Susama Barik
7. Mangulu Naik
8. Sabhya Barik
9. Bikram Naik
10. Chakra Munda
11. Manisha Naik
12. Birra Naik
13. Sampa Barik
14. Harri Lohar

Const. of cow shelter of individuals at Masuribeda

1. Sibansath Barik
2. Saiba Barik
3. Bhagaban Naik

Const. of goat shed of individuals at Kitabeda:

1. Arun Arachad Gop
2. Malli Palei
3. Jayakrushna Behera
4. Jagadish Gop

Const. of cow shelter of individuals at Kitabeda:

1. Bibhizana Palei
2. Gurg Gurucharan Palei
3. Bailochan Apat
4. Maheswar Gop
5. Indramani Palei
6. Abhimanyu Palei

Const. of goat shed of individuals of Gobardhan

1. Binod Naik
2. Phulamani Naik
3. Sanjay Naik
4. Trilochan Naik
5. Basanti Naik
6. Gurra Munda
7. Tikil Dash
8. Ganeswar Dash
9. Mani Dash
10. Bidya Purty
11. Daktar Abik
12. Bidyadhar Abik

Cow shelter:-

1. Mangulu Naik
2. Raghunath Dash
3. Balkiram Munda
4. Hamar Singh Munda
5. Gurra Munda
6. Bamia Munda
7. Bidya Purty
8. Sricharan Das
9. Bata Munda

Const. of goat shed & cow shelter of individuals at Sialijoda:-

Goat shed:

Cow shelter:

1. Pramod Mahakud
2. Ranjit Munda
3. Burungia Munda
4. Kande Munda
5. Drivere Munda
6. Manoj Munda
7. Gurra Munda
8. Panduram Munda
9. Sukulal Munda
10. Sebi Munda
11. Sudhar Munda
12. Maria Munda

1. Nandi Munda
2. Jagannath Mahakud
3. Radhesyam Munda
4. Raghur Mahakud
5. Budharam Munda
6. Rasika Munda
7. Raghur Gograi
8. Basu Munda
9. Raja Munda
10. Keni Munda

Land development projects of individuals
at Tesaburu & Sialijada.

1. Jagmohan Munda
2. Sunaram Munda
3. Gampa Munda
4. Bisan Munda.
5. Gurucharan Munda
6. Jayaram Gagrai
7. Nazia Munda
8. Birsingh Munda
9. Dubulia Munda.
10. Sibure Munda.
11. Kirsan Munda.
12. Jayakrishna Munda.
13. Manoj Munda.
14. Ram Munda.
15. Gopinath Munda.
16. Syamsundar Munda.

आवश्यकता अनुसार सड़क, पानी, बिजली, गैस, टेलीफोन, इत्यादि सुविधाएँ उपलब्ध कराने के लिए निम्नलिखित कार्यवाही करने की आवश्यकता है।

1. Installation of street light from Mahanta Sahi to Gauda Sahi at Masuribeda.
2. Repairing of bathing ghat of Gauda Sahi pond at Masuribeda.
3. Const. of kitchen & toilet at station Sahi Anganwadi center, Gobardhanpur.
4. Const. of Kalyan Mandap at Gobardhanpur station Sahi.
5. Const. of boundary wall of Mission Shakti Griha at Gobardhanpur.
6. Const. of C.C. road from Dillip Munda house to Chatekanu Munda house.
7. Const. of C.C. road from main road to Anganwadi center at Gobardhanpur.
8. Const. of boundary wall at back side of Gobardhanpur school.
9. Const. of CC road from Tesaburu colony to Kandemunda house at Sialijoda.
10. Repairing of CC road from Anganwadi center to home house at Gopala Sahi.
11. Const. of CC road from Resang house to Nandlal Gagrai house at Gagrai Sahi.
12. Const. of CC road from main road to Gurucharan house at Sialijoda.
13. CC road repairing from Yudhithir Palei house to Ganaram Munda house at Sialijoda.
14. Const. of canal from Anganwadi to Pond at Tesaburu.
15. Const. of bathing ghat at Munda Sahi pond, Sialijoda.

16. Const. of bathing ghat at Berga Sahi pond, Sialijoda.
17. Installation of 08 Nos. of Street lights at Anandabazar Chowk.
18. Const. of CC road from Purna Mahakud house to Jagannath Munda house at Deojhar.
19. Const. of CC road from Jagannath Munda house to Barogachha at Deojhar.
20. Const. of CC road from Parika Munda house to Arun Naik house at Deojhar.
21. Const. of community center at Munda Sahi Thakurani.
22. Installation of solar light at Thakurani.
23. Const. of CC road from Odia Sahi to Budha Sahi at Thakurani.
24. Const. of new Anganwadi centre at Mahadevnasa.
25. Const. of drain at Rabru Sahi.
26. Const. of drain from Rama Barik house to Laxman Barik house at Mahadevnasa.
27. Const. of drain from Bhagaban Naik house to Pardish Naik house.
28. Const. of Bathing ghat & change room at Rabru Sahi.
29. Boundary wall height & ground concrete at Anganwadi centre, Mahadevnasa.
30. Const. of drain from Kuthi Sahi to Bhagaban Naik house at Mahadevnasa.

ଗ୍ରାମ ସମାଜ ବିଜେକ

ସ୍ଥାନ: ପେଟହିର ଗ୍ରା.ପ. କାର୍ଯ୍ୟାଳୟ ୦୧-୦୭-୧୦-୨୦୨୪

ଆମ ଡା. ୦୭.୧୦.୨୦୨୪ରୁ ଶାନ୍ତିନଗରୀ ଅଞ୍ଚଳରେ ଗ୍ରା.ପ. କାର୍ଯ୍ୟାଳୟ ଠାରେ ଏକ ସୁଦୃଢ଼ ଗ୍ରାମ ସମାଜ ବିଜେକ ଅନୁଷ୍ଠିତ ଗ୍ରା.ପ. ସଭାରେ ଗ୍ରାମସ୍ତରୀୟ ଯୁବ ଶକ୍ତି ଗଠନ କରାଯାଇଥିବାରୁ ଅନୁଷ୍ଠିତ ହୋଇଥିଲା । ଉକ୍ତ ବିଜେକରେ ଆମର ୨୦୨୪-୨୫ ଆର୍ଥକ କର୍ମ ସମିତି CFC, ବି. SFC ଓ MGNREGS ର ବାର୍ଷିକ ଯୋଜନା ପ୍ରସ୍ତୁତି ସମୟରେ ବିଭିନ୍ନ ଦ୍ରବ୍ୟ ଆବେଦନ କରାଯାଇଥିଲା । ସମସ୍ତ ଶାସକ ଓ ସାହାଯ୍ୟରେ ପୁରୁଷାଳ ଅର୍ପଣ କରି ଓ ଦ୍ରବ୍ୟ ପ୍ରଦାନ କରି ସହାୟତା ଆବେଦନ କରାଯାଇ ।

୧୦/୭/୨୪

ଉପସ୍ଥିତ ଦ୍ଵାରା ସମାଜ ସଭା ଏକ ଗ୍ରାମସମାଜ ସମାପ୍ତ :

1. Laxminuda
2. Kadambini Naik (N.S.)
3. Kunjabihari Mohanta (PFO)
4. Biswanarjan Baidya (A.D.E.O)
5. Sekumati Munda (w.m.s)
6. Sukanti Munda (w.m.-1)
7. ବନମାଳୀ ବେହେରା (w.m.11)
8. Rehati Naik (w.m.-2)
9. Fulmani Munda (w.m.12)
10. Sunita Naik (w.m.-9)
11. Barita Behera (w.m.-10)
12. Koushadhya Barik (m.Bk)
13. Sujata Naik (PESAMOBILIZAR)
14. Sebati Dehury
15. Sandhya Rani Dash (GPLF President)
16. Anjana Naik (F.C)
17. Kanakalata Barik (CRP-CM)
18. padmabati Barik (GPLF Sec)
19. padmini Dash. (CRP CM)
20. Sasmita Naik (CRP-CM)
21. Sabita Rani Gope (CRP-CM)
22. Sumi man dia (S.H.G)
23. Jyotshna Rani Dash (CRP-CM)

Ganesh
Fr. Naik
dt. 02/10/2024

@BPF
Barabul Section

24. Lepaksha Mahanta (Jindal Asha)
- 25 - Rasmita Nayak (Swasthya Sangini) (Jindal Asha)
- 26 - Lili Mahakud
- 27 Mamata Naik
- 28 ମାମତା ନାୟକ
- 29 ରବିତା ନାୟକ
- 30 Sulochana Naik
- 31 ସୁଲୋଚନା ନାୟକ
- 32 Renuka marlari mahanta
- 33 sushama Mahanta (E.C)
- 34) Jharana Naik (CRP. CM)
35. ବିନା ସାମାନ୍ତ
- 36 Geetanjali Mahakud
37. Sukti mahakud
- 38 ତାମିଳା କୁମାର
- 39 କୁମାରୀ କୁମାର
40. Jagat Naik mahakud
D. S. Rama
- 41 - Sustanta Kumar Naik (Aspine)
ସୁସନ୍ତା କୁମାର
42. ବିନା ନାୟକ
- 43 Labanga Naik (GPCM Aspine)
- 44 - Ajay Kumar Naik (w.m.-1)
- 45 - Samabadi Naik
- 46 ସମାଧିନୀ ନାୟକ

ସମ୍ପୂର୍ଣ୍ଣ ଗ୍ରାମ୍ୟ ଶୁଦ୍ଧିକ ସମାପ୍ତକାରୀ ପ୍ରମୁଖ କର୍ମ ସମ୍ପୂର୍ଣ୍ଣ
ରୋଜଗା (MGNREGA) ଆୟମତେ କାର୍ଯ୍ୟକାରୀ କରିବା ଲାଗି ସର୍ବସମ୍ମତି
କ୍ରମ ଗଠନ କରାଯାଇଥିଲା ।

ଗୋଟିଏ ଗ୍ରାମ୍ୟ :

1. Imp. of road from Bhakta Mahakud house to Bidya Purdy house at Gobardhanpur.
2. Imp. of road from Bhakta Behera house to Bhaja Naik house at Masuribeda Sahi.
3. Imp. of road from Tesaburu main road to Selie Munda house at Sialijoda.
4. Repairing of check dam at Berga Sahi, Sialijoda.
5. Imp. of road from Baragachha to Purna Naik house at Deojhar.
6. Imp. of road from Baragachha to Kaibala house at Daladiri Sahi, Deojhar.
7. Imp. of road from Narayana Naik house to Gora Munda house at Daladiri Sahi, Deojhar.
8. Imp. of road from Bimal Munda house to temple at Murgabeda, Deojhar.
9. Imp. of road from Bharat Naik house to Subash ch. Naik house at Mahadevnara.
10. Completion of check dam at Rabru Sahi, Mahadevnara.

11.

ଗୋଟିଏ ଗ୍ରାମ୍ୟ :

Const. of goal shed of individuals at Masuribeda;

1. Banabari Naik
2. Sibanaath Barik
3. Bilasa Naik
4. Panka Barik
5. Karunakar Naik
6. Susama Barik
7. Mangulu Naik
8. Sabhya Barik
9. Bikram Naik
10. Chakra Munda
11. Manisha Naik
12. Birra Naik
13. Sampa Barik
14. Harri Lohar

Const. of cow shelter of individuals at Masuribeda

1. Sibanaath Barik
2. Saiba Barik
3. Bhagaban Naik

Const. of goat shed of individuals at Kitabeda:

1. Arun Arachad Gop
2. Malli Palei
3. Jayakrushna Behera
4. Jagadish Gop

Const. of cow shelter of individuals at Kitabeda:

1. Bibhizana Palei
2. Gurg Gurucharan Palei
3. Bailochan Apat
4. Maheswar Gop
5. Indramani Palei
6. Abhimanyu Palei

Const. of goat shed of individuals of Gobardhan

1. Binod Naik
2. Phulamani Naik
3. Sanjay Naik
4. Trilochan Naik
5. Basanti Naik
6. Gurra Munda
7. Tikil Dash
8. Ganeswar Dash
9. Mani Dash
10. Bidya Purty
11. Daktar Abik
12. Bidyadhar Abik

Cow shelter:-

1. Mangulu Naik
2. Raghunath Dash
3. Balkiram Munda
4. Hamar Singh Munda
5. Gurra Munda
6. Bamia Munda
7. Bidya Purty
8. Sricharan Das
9. Bata Munda

Const. of goat shed & cow shelter of individuals at Sialijoda:-

Goat shed:

Cow shelter:

1. Pramod Mahakud
2. Ranjit Munda
3. Burungia Munda
4. Kande Munda
5. Drivere Munda
6. Manoj Munda
7. Gurra Munda
8. Panduram Munda
9. Sukulal Munda
10. Sebi Munda
11. Sudhar Munda
12. Maria Munda

1. Nandi Munda
2. Jagannath Mahakud
3. Radhesyam Munda
4. Raghur Mahakud
5. Budharam Munda
6. Rasika Munda
7. Raghur Gograi
8. Basu Munda
9. Raja Munda
10. Keni Munda

Land development projects of individuals
at Tesaburu & Sialijode.

1. Jagmohan Munda
2. Sunaram Munda
3. Gampa Munda
4. Bisan Munda.
5. Gurucharan Munda
6. Jayaram Gagrai
7. Nazia Munda
8. Birsingh Munda
9. Dubulia Munda.
10. Sibure Munda.
11. Kirsan Munda.
12. Jayakrishna Munda.
13. Manoj Munda.
14. Ram Munda.
15. Gopinath Munda.
16. Syamsundar Munda.

सर्वोच्च न्यायालय, दिल्ली
मुख्य न्यायाधीश, श्री जस्टिस एन. वी. राम

1. Installation of street light from Mahanta Sahi to Gauda Sahi at Masuribeda.
2. Repairing of bathing ghat of Gauda Sahi pond at Masuribeda.
3. Const. of kitchen & toilet at station sahi Anganwadi center, Gobardhanpur.
4. Const. of Kalyan Mandap at Gobardhanpur station Sahi.
5. Const. of boundary wall of Mission Shakti Greh at Gobardhanpur.
6. Const. of C.C. road from Dillip Munda house to Chatekanu Munda house.
7. Const. of C.C. road from main road to Anganwadi center at Gobardhanpur.
8. Const. of boundary wall at back side of Gobardhanpur school.
9. Const. of CC road from Tesaburu colony to Kandemunda house at Sialijoda.
10. Repairing of CC road from Anganwadi center to some house at Gopala Sahi.
11. Const. of CC road from Resang house to Nandlal Gagrai house at Gagrai Sahi.
12. Const. of CC road from main road to Gurucharan house at Sialijoda.
13. CC road repairing from Yudhithir Palei house to Genaram Munda house at Sialijoda.
14. Const. of canal from Anganwadi to Pond at Tesaburu.
15. Const. of bathing ghat at Munda Sahi pond, Sialijoda.

16. Const. of bathing ghat at Berga Sahi pond, Sialijoda.
17. Installation of 08 Nos. of Street lights at Anandabazar Chowk.
18. Const. of CC road from Purna Mahakud house to Jagannath Munda house at Deojhar.
19. Const. of CC road from Jagannath Munda house to Barogachha at Deojhar.
20. Const. of CC road from Parika Munda house to Arun Naik house at Deojhar.
21. Const. of community center at Munda Sahi Thakurani.
22. Installation of solar light at Thakurani.
23. Const. of CC road from Odia Sahi to Budha Sahi at Thakurani.
24. Const. of new Anganwadi centre at Mahadevnasa.
25. Const. of drain at Rabru Sahi.
26. Const. of drain from Rama Barik house to Laxman Barik house at Mahadevnasa.
27. Const. of drain from Bhagaban Naik house to Pardish Naik house.
28. Const. of Bathing ghat & change room at Rabru Sahi.
29. Boundary wall height & ground concrete at Anganwadi centre, Mahadevnasa.
30. Const. of drain from Kuthi Sahi to Bhagaban Naik house at Mahadevnasa.

25
Tapaswini Naik (CRP-CM)
padmabati Bork (sey)
Kanakalata Bork (CRP-CM)
Jyotshma Rani Dash (CRP-CM)
Rupeli Bork

CLTI) ରକ୍ଷଣା କାର୍ଯ୍ୟ

ମରାମତି ନାୟକ

ଘଣ୍ଟା ଲାଗି ନାୟକ

ଘଣ୍ଟା ଲାଗି ନାୟକ

Lijv Naik

ଅଧ୍ୟକ୍ଷ ମହାଶୟ

Sabira Naik (E.C)

Paohmin Dash (C.R.P)

Manoj Kumar Naik

Bikoram Mando

ଘଣ୍ଟା ଲାଗି ନାୟକ

sandhya rani dash (GP2F-pre)

purnam Bork (EC)

Selachan Bork (EC)

ଘଣ୍ଟା ନାୟକ

ନିମ୍ନଲିଖିତ ପ୍ରସ୍ତାବିତ ଲୁହର ସର୍ବ ସମ୍ପତ୍ତି କ୍ରୟ ମୁଦ୍ରିତ ହେଲା ।

ପ୍ରଥମ ପ୍ରସ୍ତାବ:

ଆଜିକାଲି ବିଭିନ୍ନ ଲୁହର ବ୍ୟବହାର କାର୍ଯ୍ୟାଳୟ ସମ୍ପୂର୍ଣ୍ଣ
ଧୁଳି ଯାଏ ଯାଏ ବାର୍ଣ୍ଡିଙ୍ଗ୍ ~~କ~~ Tata Steel, Katamati
Company ଲୁହରୁ ଏକ (antenn) ଯୁକ୍ତ ନିର୍ମାଣ କରାଯିବ
ସର୍ବ ସମ୍ପତ୍ତି କ୍ରୟ ପ୍ରସ୍ତାବ ମୁଦ୍ରିତ ହେଲା ।

Compliance Report of 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".

SL No.	Condition	Compliance
A	the project authority shall adopt best mining practice for the given mining conditions. In the mining area, adequate number of check dams, retaining walls/structures, garland drains and settling ponds should be provided to arrest the wash-off with rain water in catchment area.	Complied. Mining is strictly being carriedout as per the Approved Mining Plan by IBM. We have constructed retaining walls, garland drains, settling ponds at appropriate locations inside mines area to arrest the run-off with rainwater in catchment area.
B	the natural water bodies and or streams which are flowing in and around the village should not be disturbed. The water table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the project authorities have to provide water to villagers for their use. a provision for regular monitoring of water table in open dug well located in village should be incorporated to ascertain the impact of mining over ground water table.	Being complied. No natural water bodies or strams are flowing within the mining lease area. For augmentation of ground water table, we have constructed water harvesting ponds. Water level is monitored on regular basis by installation of automatic piezometers in core zone area & manual water level meter in buffer zone area.
C	the illumination and sound at night at project sites distribute 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. the project proponents (PPs) must ensure that the biological clock of the villagers is not disturbed by orienting the floodlights/masks away from the villages and keeping the noise levels well within the prescribed limits for day/night hours.	Being complied. No mining activities are carriedout within an area of 500 meters from village boundary. Blasting is being carriedout during day time only. And latest controlled blasting technologies by using NONEL to control noise & vibration are being carriedout. Lighting arrangements is done towards active mining areas away from village areas/ forest areas, there is no disturbance caused to nearby villages/ forest due to illumination and noise during night time.
D	the project authority shall make necessary alternative arrangements, where required, in consultation with the State Government to provide alternate areas for livestock grazing. In this context, project Authority should implement the directions of the hon'ble Supreme Court with regard to acquiring grazing land. the sparce trees on such grazing ground, which provide mid-day shelter from the scorching sun should be scrupulously guarded against felling lest the cattle abandon the grazing ground or return home by noon.	No grazing land present within the mining lease area.

E	<p>where ever blasting is undertaken as part of mining activity, the project authority shall carry out vibration studies well before approaching any such habitats or other buildings to evaluate the zone of influence and impact of blasting on the neighbourhood. within 500 meters of such sites vulnerable to blasting vibrations, avoidance of use of explosives and adoption of alternative means of mineral extraction, such as ripper/dozer combination/ rock breakers/ surface miners etc. should be seriously considered and practiced wherever practicable. a provision for monitoring of each blast should be made so that the impact of blasting on nearby habitation and dwelling units should be ascertained. the covenant of lease deed under Rule 31 of MCR 1960 provides that no mining operations shall be carriedout within 50 meters of public works such as public roads and buildings or inhabited sites except with the prior permission from the competent authority.</p>	<p>Being Complied. No blasting is being carriedout within an area of 500 meters near habitats or other public buildings. Additionally, controlled blasting techniques with latest blasting technologies by using non-electric down detonetors with hole delay system and non-electronic trunk line delay system at surface which gives minimum vibration level as well as low value of air blast on the surface. ground vibration is being regularly monitored with the help of latest minimate/micromate Seismograph.</p>
F	<p>main haul road in the mine should be provided with permanent sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. Crusher and material transfer points should invariably be provided with bag filters and or dry fogging system. belt conveyors should be fully covered to avoid air borne dust.</p>	<p>Being complied. Fixed water spniklers installed at permanent haul road. Additionally, water sprinkling is carrieoud on haul road, loadin unloading points with help of mobile water tankers. Primary Crusher is also fitted with dry-fog system. The iron ores are transported to the railway siding through conveyor belts.</p>
G	<p>the project authority shall ensure that the productivity of agricultural crops is not affected due to mining operations. Crop liability insurance policy has to be taken by the PP as a precaution to compensate for any crop loss. The impact zone shall be 5km from the boundary of mine lease-area for such insurance policy. in case, several mines are located in a cluster, the associations of owners of the cluster mines, formed inter-alia, to sub-srve such an objective, shall take responsibility for securing such crop liability policy.</p>	<p>Being Complied. We have General Liability Insurance Policy which includes for any accidental crop damage due to mining activities. The copy of General Liability Insurance is attached as Annexure- XXXVII.</p>
H	<p>in case any village is located within the mining leasehold which is not likely to be affected due to mining activities during the life of mine, the expert appraisal committee (EAC) should consider the proposal of environment clearance (EC) for reducing mining area. the mining lease may be executed for the area for which EC is accorded. the mining plan may also be accordingly revised and required stipulated stipulations under the MMDR Act, 1957 rind MCR,1960 met.</p>	<p>Not Applicable. As no village present within the mining lease area.</p>
I	<p>transportation of the minerals by road passing through the village shall not be allowed, A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sounds dust and accidents could be mitigated. the PP shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the project. no road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.</p>	<p>Not Applicable. Mineral transportation is done through conveyor belts to railway siding and further the products are transported to destination through rail.</p>
J	<p>likewise, alteration or re-routing of foot paths, pagdandies, card roads, the villages infrastructure/public utilities or roads (for purposes of land acquisition for mining) shall be avoided to the extent possible and in case such acquisition is inevitable, alternative arrangements shall be made first and then only the area acquired. in these types of cases, inspection reports by site visit by experts may be insisted upon which should be done through reputed institutes.</p>	<p>Not Applicable. Mineral transportation is done through conveyor belts to railway siding and further the products are transported to destination through rail.</p>

K	<p>as CSR activities by companies including the mining Establishments has become mandatory upto 2% of their financial turnover, Socio Economic Development of the neighbourhood Habitats could also be planned and executed by the PPs more systematically based on the 'need based door to door survey' by established Social Institutes/ Workers on the lines as required under TOR. "R&R plan/compensation details for he project affected people (PAP) should be furnished. while preparing the R&R plan, the relevant state/National Rehabilitation 7 Resettlement Policy should be kept in view. In respect of SC's/ST's and other weaker sections of the society in the study area, a need based sample survey, family wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line department of the state government. it may be clearly brought out whether the village located in the mine lease area will be shifted or not. the issue relating to shifting of village including their R&R and social-economic aspects should be discussed in the EIA report.</p>	Being Complied.
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Sarpanch
Deojhar Panchayat Office
Deojhar

Ref: MD/ENV/ 173 / 110 / 2021

Dated: 10.08.2021

Sub: Environment Clearance of M/s Tata Steel Limited for expansion of Katamati Iron Mine from 8 MTPA to 13.5 MTPA (ROM) with total excavation of 15 MTPA along with mineral beneficiation plant of 4 MTPA in the mining lease area of 403.3238 ha located at Deojhar and Thakurani village, District Keonjhar, Odisha

Ref: Vide letter no. IA-J-11015/63/2018-IA-II (M) dated 05.08.2021.

Dear Sir,

This is to inform you that Environment Clearance has been granted for expansion of Katamati Iron Mine from 8 MTPA to 13.5 MTPA (ROM) with total excavation of 15 MTPA along with mineral beneficiation plant of 4 MTPA in the mining lease area of 403.3238 ha located at Deojhar and Thakurani village, District Keonjhar, Odisha. A copy of EC is enclosed for reference.

Thanking you,

Yours sincerely,
f: Tata Steel Limited

Pinky Kumar
Head Planning (OMQ)

Encl: As above

Received
Mangal Munde
Sarpanch 01-11/2021
Deojhar Grampanchayat
Block-Joda, Dist-Keonjhar

TATA STEEL LIMITED

Mines Division Noamundi 833 217 India
Tel 91 9234301340 Fax 91 6596 290737
Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001
Tel 91 22 66658282 Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com



Sarpanch
Anseikala Panchayat Office
Anseikala

Ref: MD/ENV/ 174 / 110 / 2021

Dated: 10.08.2021

Sub: Environment Clearance of M/s Tata Steel Limited for expansion of Katamati Iron Mine from 8 MTPA to 13.5 MTPA (ROM) with total excavation of 15 MTPA along with mineral beneficiation plant of 4 MTPA in the mining lease area of 403.3238 ha located at Deojhar and Thakurani village, District Keonjhar, Odisha

Ref: Vide letter no. IA-J-11015/63/2018-IA-II (M) dated 05.08.2021.

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Thanking you,

Yours sincerely,
f: Tata Steel Limited

Pinika Kumar
Head Planning (OMQ)

Encl: As above

Received
[Signature]
Sarpanch 11/08/21
Anseikala G.P.

TATA STEEL LIMITED

Mines Division Noamundi 833 217 India
Tel 91 9234301340 Fax 91 6596 290737
Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001
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Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com



Regional Office
Ministry of Environment, Forest & Climate Change
Regional Office (EZ), A/3
Chandrasekharpur
Bhubaneswar - 751023

MD/ENV/ 187-A / 98 /2021
Date: 16.08.2021

Sub: Advertisement regarding grant of Environmental Clearance for expansion of Katamati Iron Mine of M/s Tata Steel Limited.

Ref: Environmental Clearance letter no. IA-J-11015/63/2018.IA.II (M) dated: 05.08.2021.

Dear Sir,

In compliance to the standard condition no. 7 in EC granted with vide letter no. IA-J-11015/63/2018.IA.II (M) dated: 05.08.2021 which states that *"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 clearance letter mentioning that the instant project has been accorded EC and copy of EC letter is available with the State Pollution Control Board/Committee and website of 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"* we hereby advertised in two newspapers i.e Orissa Post(English) and Prameya(Odiya) on 11.08.2021. A copy is enclosed as **Annexure**.

Thanking you,

Yours faithfully,
f: Tata Steel Limited

Chief (Mine Planning & Projects), OMQ

Encl: As above

TATA STEEL LIMITED

Mines Division Noamundi 833 217 India
Tel 91 9234301340 Fax 91 6596 290737
Registered Office Bombay House 24 Horni Mody Street Fort Mumbai 400 001
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Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

ଭରଣ ଗାଠ ଦେଇ ରାଜ୍ୟରେ ଗଣତନ୍ତ୍ର

ଭାରତୀୟ ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଭାବେ ଭରଣ ଗାଠକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି। ସେମାନେ କହିଛନ୍ତି ଯେ, ଭରଣ ଗାଠ ହେଉଛି ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଏବଂ ଏହାକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ହେବ ତେବେ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି।

ଆଗରୁ ଚେତନରେ ଜଣା ରଚନା

ଭାରତୀୟ ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଭାବେ ଭରଣ ଗାଠକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି। ସେମାନେ କହିଛନ୍ତି ଯେ, ଭରଣ ଗାଠ ହେଉଛି ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଏବଂ ଏହାକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ହେବ ତେବେ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି।

ଦେଇ ମେଗାଭଳି କରତ, ଦେଇ ପିତର

ଭାରତୀୟ ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଭାବେ ଭରଣ ଗାଠକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି। ସେମାନେ କହିଛନ୍ତି ଯେ, ଭରଣ ଗାଠ ହେଉଛି ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଏବଂ ଏହାକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ହେବ ତେବେ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି।

ଭକ୍ତଙ୍କ ପାଇଁ ଖୋଲିଲା ମା'ଙ୍କ ଦୁଆର



ବୁଦ୍ଧ ବାର୍ଷିକର ଯେରିଲେ ବାରିପଦାବାସୀ



ବାରିପଦାବାସୀମାନେ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ଆହ୍ୱାନକୁ ଗ୍ରହଣ କରି ଭରଣ ଗାଠକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ଆହ୍ୱାନ କରିଛନ୍ତି। ସେମାନେ କହିଛନ୍ତି ଯେ, ଭରଣ ଗାଠ ହେଉଛି ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଏବଂ ଏହାକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ହେବ ତେବେ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି।

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ଓଡ଼ିଶାରେ ଯୋଗୁ ଓଡ଼ିଶା ୧୪ ତରିଆ ୨୫ ଲକ୍ଷ ଚଳାଣି ଯୋଗୁ ୫୦ ଲକ୍ଷ ଚଳାଣି

ଓଡ଼ିଶା ଚଳାଣି ଯୋଗୁ ୫୦ ଲକ୍ଷ ଚଳାଣି

ଓଡ଼ିଶା ଚଳାଣି ଯୋଗୁ ୫୦ ଲକ୍ଷ ଚଳାଣି

ଓଡ଼ିଶା ଚଳାଣି ଯୋଗୁ ୫୦ ଲକ୍ଷ ଚଳାଣି

୨ ବାର୍ଷିକ ଧନ୍ୟ, ମହିଳା ମୃତ

ଭାରତୀୟ ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଭାବେ ଭରଣ ଗାଠକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି। ସେମାନେ କହିଛନ୍ତି ଯେ, ଭରଣ ଗାଠ ହେଉଛି ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଏବଂ ଏହାକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ହେବ ତେବେ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି।

ବାଲି ବୋହେଇ ଶାନ୍ତି କରବତ

ଭାରତୀୟ ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଭାବେ ଭରଣ ଗାଠକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି। ସେମାନେ କହିଛନ୍ତି ଯେ, ଭରଣ ଗାଠ ହେଉଛି ଗଣତନ୍ତ୍ରର ପ୍ରତୀକ ଏବଂ ଏହାକୁ ସମସ୍ତଙ୍କ ମଧ୍ୟରେ ବଣ୍ଟନ କରିବାକୁ ହେବ ତେବେ ଗଣତନ୍ତ୍ର ପ୍ରମୋଦ ଗୋଷ୍ଠୀର ସଭ୍ୟମାନେ ଆହ୍ୱାନ କରିଛନ୍ତି।

ପୂଜା

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ODISHA JOINT ENTRANCE EXAMINATION-2021

01JEE-2021

NOTICE REGARDING EXTENSION OF LAST DATE OF APPLICATION FOR B.TECH. COURSE (SPECIAL JEE)

The last date for submission of online application forms for B.Tech. Course (Special JEE), which was earlier notified as 16.08.2021, is hereby extended upto 17.08.2021 (11.59 PM) and last date for fee payment upto 18.08.2021 (11.59 PM).

During this period, the candidates, who have already submitted their applications, can log in to the online OJEE Application Portal using their ID and password, make any correction, if required in the information already filed by them and also modify, if they want, their choice of examination centres as per their convenience.

The interested candidates may kindly note that these dates are final and there will not be any more extension of these dates. Candidates are advised to visit the official website of OJEE (www.ojee.or.in) regularly for updated information.

Dr. CHANDAN KUMAR DASH
Joint Chairman, OJEE Odisha

DIRECTORATE OF HIGHER SECONDARY EDUCATION, ODISHA

ADMISSION INTO HIGHER SECONDARY SCHOOLS OF THE STATE FOR THE SESSION 2021-22

Notice

The Directorate of Higher Secondary Education, Odisha, is pleased to announce that the admission into Higher Secondary Schools of the State for the Session 2021-22 will be held on the following dates:

Application Form

1. From 01.08.2021 to 31.08.2021 (11.59 PM)

2. From 01.09.2021 to 30.09.2021 (11.59 PM)

3. From 01.10.2021 to 30.10.2021 (11.59 PM)

4. From 01.11.2021 to 30.11.2021 (11.59 PM)

5. From 01.12.2021 to 30.12.2021 (11.59 PM)

6. From 01.01.2022 to 31.01.2022 (11.59 PM)

7. From 01.02.2022 to 31.02.2022 (11.59 PM)

8. From 01.03.2022 to 31.03.2022 (11.59 PM)

9. From 01.04.2022 to 30.04.2022 (11.59 PM)

10. From 01.05.2022 to 31.05.2022 (11.59 PM)

11. From 01.06.2022 to 30.06.2022 (11.59 PM)

12. From 01.07.2022 to 31.07.2022 (11.59 PM)

13. From 01.08.2022 to 31.08.2022 (11.59 PM)

14. From 01.09.2022 to 30.09.2022 (11.59 PM)

15. From 01.10.2022 to 30.10.2022 (11.59 PM)

16. From 01.11.2022 to 30.11.2022 (11.59 PM)

17. From 01.12.2022 to 30.12.2022 (11.59 PM)

18. From 01.01.2023 to 31.01.2023 (11.59 PM)

19. From 01.02.2023 to 31.02.2023 (11.59 PM)

20. From 01.03.2023 to 31.03.2023 (11.59 PM)

21. From 01.04.2023 to 30.04.2023 (11.59 PM)

22. From 01.05.2023 to 31.05.2023 (11.59 PM)

23. From 01.06.2023 to 30.06.2023 (11.59 PM)

24. From 01.07.2023 to 31.07.2023 (11.59 PM)

25. From 01.08.2023 to 31.08.2023 (11.59 PM)

26. From 01.09.2023 to 30.09.2023 (11.59 PM)

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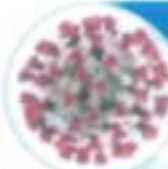
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NEW ENTRANTS

Over a hundred Congress and BJP workers from Khorda, Tapa and other areas will take part in the regional party's headquarters in Bhubaneswar, Tuesday.



COVID-19 TRACKER

Table with 3 columns: Date, Confirmed, Recovered. Rows for 01.08.2020, 02.08.2020, 03.08.2020.

Project Tiger sees 50% cut in central funds

Over ₹40 crore has been sanctioned by Union govt for tiger and elephant projects in three years

NEW DELHI: The Union government has announced a 50 per cent reduction in central funds for Project Tiger and Project Elephant over the next three years. The Ministry of Environment, Forest and Climate Change has announced that the central government will release only ₹40 crore for tiger and elephant projects over the next three years, compared to ₹80 crore in the previous three years.



Project Tiger and Project Elephant are major conservation programs in India. The Union government has announced a 50 per cent reduction in central funds for these projects over the next three years.

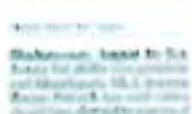
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Internal assessment system for Classes IX, X



NEW DELHI: The Union government has announced an internal assessment system for Classes IX and X. The Ministry of Education has announced that the central government will implement an internal assessment system for Classes IX and X from the academic year 2020-21. The internal assessment system will be implemented for all subjects in Classes IX and X.

Soumya Ranjan takes a dig at Naveen's style of functioning



NEW DELHI: Union Minister Soumya Ranjan has taken a dig at Naveen Patel's style of functioning. He said that Naveen Patel's style of functioning is not in line with the values of the Congress party. He said that Naveen Patel's style of functioning is not in line with the values of the Congress party.



NEW DELHI: Union Minister Soumya Ranjan has taken a dig at Naveen Patel's style of functioning. He said that Naveen Patel's style of functioning is not in line with the values of the Congress party. He said that Naveen Patel's style of functioning is not in line with the values of the Congress party.

₹374cr spl assistance for Odisha

NEW DELHI: The Union government has announced a special assistance package of ₹374 crore for Odisha. The Ministry of Finance has announced that the central government will release ₹374 crore for Odisha over the next three years.

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POLITICKLE BY MANJUL



Mandaviya urged to implement Ayushman Bharat in Odisha



NEW DELHI: Union Minister Mandaviya has urged the Odisha government to implement Ayushman Bharat. He said that Ayushman Bharat is a flagship program of the Union government and it is important for the Odisha government to implement it.

Legal notice: Declaration of Wilful Defaulter. Includes details of the defaulter and the amount due.

TATA STEEL NOTICE. Includes details of the notice and the company's contact information.

Panchayat polls to be held on time: Law min

NEW DELHI: Union Minister Law Minister has announced that Panchayat polls will be held on time. He said that the Union government is committed to holding Panchayat polls on time.

Mandaviya urged to implement Ayushman Bharat in Odisha

NEW DELHI: Union Minister Mandaviya has urged the Odisha government to implement Ayushman Bharat. He said that Ayushman Bharat is a flagship program of the Union government and it is important for the Odisha government to implement it.



Your (Half Yearly Compliance Report) has been Submitted with following details

Proposal No	IA/OR/MIN/123688
Compliance ID	125618395
Compliance Number(For Tracking)	EC/M/COMPLIANCE/125618395/2025
Reporting Year	2025
Reporting Period	01 Dec(01 Apr - 30 Sep)
Submission Date	01-12-2025
RO/SRO Name	Shri Senthil Kumar Sampath
RO/SRO Email	agmu156@ifs.nic.in
State	ODISHA
RO/SRO Office Address	Integrated Regional Offices, Bhubaneswar

Note:- SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, ODISHA with Notification to Project Proponent.

Date: 31.03.2024

OMQ/EMP/02/2024

DECLARATION

Formation of Environment Management Cell

Location: Ore Mines & Quarry Division which includes following locations→

1. Noamundi Iron Mine, over 1160.06 Ha located at Mahul, Balijore, Korta, Noamundi, Sarbil & Balijori villages, West Singhbhum District, Jharkhand.
2. Katamati Iron Mine, over 403.3238 Ha. At village Deojhar & Thakurani RF, Keonjhar District, Odisha.
3. Joda East Iron Mines, over 671.093 Ha. Located in village Joda, Kamarjoda, Banspani, Khuntpani & Baitarani RF in Barbil Taluka, Keonjhar District, Odisha.
4. Khondbond Iron & Mn. Mines, over 978 Ha. Located in village Khondbandh, Tehsil Barbil, Keonjhar District, Odisha.
5. Vijaya-II Iron Ore Mines, over 155.078 Ha. Located in village Ghatkuri, Tehsil: Noamundi, West Singhbhum District, Jharkhand.
6. Kalamang West (Northern Part) Block Iron Ore Mines, over 92.875 Ha. Located at village Gandalpada, Keonjhar District in villages Kalamang & Ghodabudani, Sundargarh Districts, Odisha.
7. Neelachal Iron Ore Mines, over 874.290 Ha. Located at Keonjhar & Sundargarh Districts, Odisha.
8. Gandhalpada Iron Ore Mine, over 241.10 Ha. At Gandhalpada, Guali and Barpada Villages, Barbil Tehsil, Keonjhar District, Odisha.

A separate Environment Management Cell has been formed, with suitable qualified personnel, under the control of Chief Mine Planning & Projects, who reports directly to the General Manager of Ore Mines & Quarry Division. The environment Management Cell will ensure compliance of following Acts & Rules but not limited to:

1. The Environment (Protection) Act, 1986.
2. Environmental Impact Assessment Notification, 14th Sep-2006.
3. Wildlife Protection Act 1972
4. Air (Prevention and Control of Pollution) Act, 1981
5. Water (Prevention and Control of Pollution) Act 1974
6. Noise Pollution (Regulation and Control Act) 1990
7. Public Liability and Insurance Act 1991
8. The Forest (Conservation) Act. 1980
9. Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016.
10. E-waste Management Rules, 2022
11. Bio-medical Waste Management Rules, 2016
12. Battery Waste Management Rules, 2022

13. Plastic Waste Management Rules, 2022

The Environment Management Cell Consists of Following Personnels:

1. Shri. Awnish Kumar (Chief-Mine Planning & Projects)
2. Shri. Mukesh Kumar Prasad (Head-Environment Management)
3. Shri. Pinku Kumar (Head- Mine Planning)
4. Shri. Vivek Kumar Agarwal (Senior Area Manager- Planning)
5. Shri. Abinash Das (Area Manager- Environment)
6. Shri. Gaurav Dubey (Area Manager- Environment)
7. Shri. Roshan Singh (Area Manager- Horticulture)
8. Shri. Gaurav Mukherjee (Area Manager- Planning)
9. Shri. Vishal Kumar Singh (Area Manager- Planning)
10. Shri. Debasish Das (Senior Manager- Environment)
11. Shri. Sudhanshu Ranjan (Manager- Environment)
12. Shri. Shubham Singh (Manager-Environment)
13. Shri. Rishi Raj Kashyap (Manager-Environment)
14. Shri. Ramendra Kumar (Officer- Environment)
15. Shri. Jhasketan Pradhan (Senior Environment Assistant)
16. Shri. Soumyak Palei (Environment Assistant)
17. Shri. Pragyan Prakash Mohanto (Environment Assistant)
18. Shri. Ganesh Karua (Environment Assistant)
19. Shri. Bharat Pan (Environment Assistant)
20. Shri. Gurucharan Laguri (Environment Assistant)
21. Shri. Gayatri Behera (Environment Chemist)
22. Shri. Jarsaniya Harshkumar Dayabhai

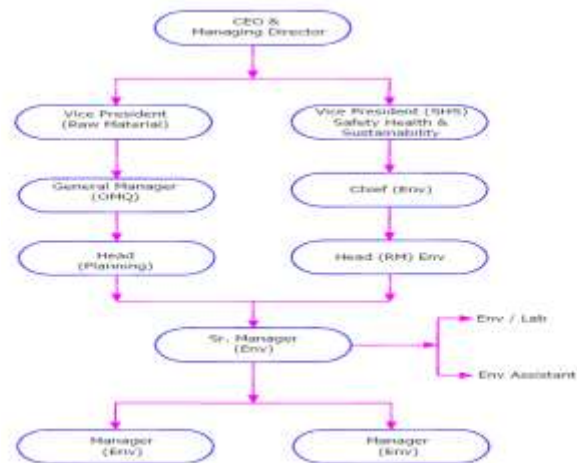
The detailed Organogram is as follows:

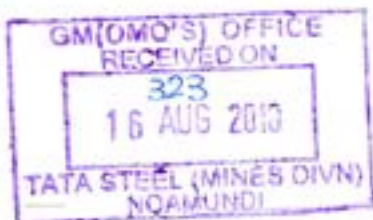
f: Tata Steel Limited



Awnish Kumar

Chief- Mine Planning & Projects (OMQ)





BY REGD POST

OFFICE OF THE
STATE POLLUTION CONTROL BOARD, ORISSA

Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII,
Bhubaneswar - 751 012

No. 12850 /

IND-II-NOC- 5109

Date 04.08.10

OFFICE MEMORANDUM

In consideration of the application for obtaining Consent to Establish for **M/s Katamati Iron Mine of Tata Steel Limited** the State Pollution Control Board has been pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 for increase in production of **Iron Ore from 2.0 Million Ton /Annum to 8.0 Million Ton/Annum (Over mine lease hold area of 403.3238 ha) At/Po: Deojhar**, in the district of **Keonjhar** with the following conditions.

GENERAL CONDITIONS.

1. This Consent to establish is valid for the product, quantity, manufacturing process and raw materials as mentioned in the application and for a period of five years from the date of issue of this letter, provided commencement of production of the proposed project has not taken place in the meantime.
2. If the proponent fails to start operation of the project within five years but substantial physical progress has been made then a renewal of this consent shall be sought by the proponent.
3. Adequate effluent treatment facilities are to be provided such that the quality of sewage and trade effluent satisfies the standards as prescribed under Environment Protection Rule, 1986 or as prescribed by the Central Pollution Control Board and/or State Pollution Control Board or otherwise stipulated in the special conditions.
4. All emission from the industry as well as the ambient air quality and noise shall conform to the standards as laid down under Environment (Protection) Act, 1986 or as prescribed by Central Pollution Control Board/State Pollution Control Board or otherwise stipulated in the special conditions.
5. Appropriate method of disposal of solid waste is to be adopted to avoid environmental pollution.
6. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous Waste (Management & Handling) Rules 1989, Hazardous Chemical Rules, /Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.

7. The industry is to apply for grant of Consent to operate under section 25/26 of Water(Prevention & Control of Pollution)Act, 1974 & Air (Prevention & Control of Pollution)Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board.
8. **This consent to establish is subject to statutory and other clearances from Govt. of Orissa and/or Govt. of India, as and when applicable.**

SPECIAL CONDITIONS :-

1. The mine has to seek environmental clearance as per the EIA notification 2006 and mining activity for proposed mining project shall commence after obtaining environmental clearance.
2. A bank guarantee commensurate with the production level will be taken by the Board for continuous satisfactory environmental compliance of the mine during the period for which consent to operate is granted as and where required.
3. The mine is operating under provisions of deemed extension of mining lease since 17.1.2003. Consent to establish for the proposal is subject to grant of mining lease from Steel & Mines Department, Govt. of Orissa.
4. The mine shall obtain permission for drawl of water from Water Resource Deptt., Govt. of Orissa before implementation of this expansion project.
5. The mine has proposed for increase of height of dyke of tailing pond of beneficiation plant of Nuamundi iron ore mine for tailing disposal. Consent to establish for the proposal is subject to permission from concerned authority for increase of height of dyke of tailing pond.
6. The mine shall achieve the production target by deployment of following equipment and machineries.

Sl.No.	Equipment	Capacity	Number
1.	Shovels	(3.5/6.0) m ³	4-5
2.	Drills	(100-150) mm	4-5
3.	Dumpers	25 T/50T/60T/100T	18-22
4.	Dozer	300KW	04
5.	Grader	16 feet blade	02
6.	Mining Loader	10 m ³	02
7.	Water Sprinkler	28KL	02
8.	Pit Vehicles	-	03
9.	Maintenance van	-	01
10.	Diesel tanker	10 KL	01
11.	Jack Hammer	32mm	03

7. No change in mining technology and scope of working shall be made without prior approval of the Board.
8. Top soil should be stacked properly with proper slope at earmarked site(s) with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.
9. Concurrent back-filling should be started from the fourth year of operation. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests with a copy to the Board on yearly basis.
10. Reclamation programme alongwith the post closure plan is to be submitted within 06 months from the date of issue of this order. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material.
11. Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data. The detail specification shall be worked out and submitted to the Board.
12. At stockpile and loading plant area, a net work of drains with concrete bottom shall be constructed at a depth of 1.5 meter below the lowest level on the sites parallel to the stockpile area with interconnected box culverts. The sloping of surface shall be given inward to the stockpiles so that surface water will only infiltrate in to the drain.
13. Surface run-off from OB dump area, mineral stock yard, top soil storage area and rain water to be pumped from quarry shall be routed through adequate settling pond (designed maximum hourly rain fall basis) to meet prescribed standard of SS-50 mg/l and O& Grease-5 mg/l before discharge into natural stream/water courses during monsoon.
14. Regular monitoring of ground water level and quality should be carried out by establishing a net work of existing wells. The monitoring should be done four times a year in pre-monsoon (April/May), Monsoon (August), Post-monsoon (November) and winter (January) seasons. Data thus collected should be submitted to the Board quarterly. Following heavy metals need to be monitored at least once during post monsoon period whose values shall not exceed as per following standard.

i)	Cd	-	2.0 mg/l
ii)	Cr+6	-	0.10 mg/l
iii)	Copper	-	3.0 mg/l
iv)	Lead	-	0.10 mg/l
v)	Mercury	-	0.01 mg/l
vi)	Nickel	-	0.50 mg/l
vii)	Zinc	-	5.0 mg/l

15. Domestic effluent shall be discharged to soak pit via septic tank constructed as per BIS specification.

16. Wastewater (workshop, wastewater from the mine i.e. pit water, check dams or any other discharge leaving lease boundary of the mine) should be properly collected, treated so as to conform the prescribed standard i.e. pH = 6 – 9.0, SS = 50 mg/l, & O & G = 5 mg/l as amended from time to time. Oil and grease trap should be installed before discharge of effluents from workshop.
17. Drill should be wet operated or with dust extractors and controlled blasting should be practices.
18. Six ambient air quality monitoring stations for 24 hours operation should be established in the core zone as well as in the buffer zone for RPM, SPM, SO₂, NO_x and CO monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.
19. Data on ambient air quality (PM10, PM2.5 SPM, SO₂, NO_x and CO) should be regularly submitted to the State Pollution Control Board once in six months.
20. Adequate measures to control fugitive emission shall be taken during loading and transportation of minerals, haul roads, drilling, excavation, ore stack pile and truck loading areas.
21. The speed of dumpers / trucks on haul roads shall be controlled as increased speed increases dust emission. Overloading of transport vehicles shall be avoided.
22. Drilling operation need to be conducted as per the recommendations of the manufacturer using sharp drill bits. Applying sufficient thrust on the drill bit and providing dust hood at the mouth of drill hole collar to prevent the generation of dust to be air-borne.
23. Pre-wetting of blasting site shall be practiced.
24. Optimized blasting methods shall be practiced i.e. matching the explosive to the drilling pattern, rock characteristics and proper stemming of the holes. Site specific drilling pattern, optimum charging of explosives, adequate stemming and introduction of delays shall be practiced.
25. During transportation of ore by trucks through public roads, the truck shall be properly covered with tarpaulin sheets / leak proof coverings and shall ply at safe speed.
26. Dust suppression on mine haul roads, active OB dumps and mine working benches shall be done by spraying water through water sprinklers along with chemical binders/wetting agents at frequent interval in order to reduce water consumption and to improve retention and re-absorption capacity of water. The additive chemicals should not have any adverse impact on the environment. Water sprinklers of fixed type shall also be provided at the mine HEMM maintenance shop, other service centers and approach roads from mines to raw material handling & product handling area to prevent the generation of dust to be air borne.
27. The mine shall provide dry fog as well as dust extraction system in the potential dust generating points of crusher and screening plants to control fugitive emission.
28. Regular collection of spilled over raw material from haul roads shall be practiced to prevent the generation of dust due to movement of dumpers /truck.

29. A green belt of adequate width and density preferably with local species along the periphery of the mine shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt. An action plan for this purpose shall be prepared and shall be submitted accordingly.
30. Noise is best abated at source by selecting right machinery and equipment by proper mounting of equipment by providing noise insulating enclosures or padding as far as possible.
31. Noise barriers shall be constructed between sources and affected areas (thick belt of trees around mine boundaries, waste dumps, hills and mountainous land forms can act as such barrier).
32. Adequate measures shall be taken for control of noise levels in the work environment of mine area so that noise levels at the boundary line of M.L area shall not exceed 75 dB(A) during day time (6 AM to 10 AM) and 70 dB(A) during night time (10. PM to 6 AM).
33. The waste dumps shall be located away from the natural nallas, rivers in the area and on an impervious & non-mineralised area to minimize the water pollution.
34. The OB/waste dumps shall be properly dressed benched stopped at low angle with terracing and bamboo barricades in the slopes making retaining walls stone barriers at the toe of the dumps gully plugging etc to prevent the solid erosion during monsoon, besides establishing vegetation on dump top as well as its slope surface. In difficult cases, hydro-seedling technique or use of geo-tiles mat embedded with seeds shall be adopted.
35. The completed out slope of the waste dumps should not exceed 37degrees from horizontal to avoid excessive erosion and easy vegetation.
36. Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.
37. A separate environmental management cell with suitable qualified personnel should be set up under the control of a Senior Executive, who will report directly to the Head of the organization.
38. All efforts shall be taken to protect the existing water bodies in the surrounding. A definite plan in this regard shall be submitted to the Board within 06 month from the date of issue of this order.
39. This consent to establish is granted subject to grant of Explosive License from competent Authority. The valid Explosive License must be submitted to this Board while applying for consent to operate to this Board.
40. The mine shall obtain forest clearance under Forest (Conservation) Act. 1980 if there is involvement of forest land in the mining lease area.

41. The Board may impose further conditions or modify the conditions stipulated in this order during installation and/or at the time of obtaining consent to operate and may revoke this clearance in case the stipulated conditions are not implemented.
42. The above conditions will be enforced, inter-alia, under the provisions of the water (Prevention & Control of pollution) Act, 1974 and Air(Prevention & Control of Prevention)Act. 1981 and Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rule.

Sde
4/8/11
MEMBER SECRETARY

To,

The General Manager (OMQ)
Katamati Iron Mine of Tata Steel Ltd.,
At/PO: Noamundi, Dist: Singhbhum(W)
Jharkhand- 833217

Memo No. _____/Dt.

Copy forwarded to:

1. The Secretary Steels & Mines, Govt. of Orissa, Bhubaneswar
2. The Collector, Keonjhar
3. The Director, Factories & Boiler, Bhubaneswar
4. Regional Officer, S.P.C Board, Keonjhar
5. DFO, Keonjhar
6. Copy to Guard file/Consent section

SR. ENV. ENGINEER (N)

BY REGD. POST WITH AD

STATE POLLUTION CONTROL BOARD, ORISSA

A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-2561909, Fax: 2562822, 2560955REVISED CONSENT ORDERNo. 1202 /IND-I-CON-185 Dt. 24.01.2011CONSENT ORDER NO. 114

Sub : Consent for discharge of sewage and trade effluent under section 25/26 of Water (PCP) Act, 1974 and for existing / new operation of the plant under section 21 of Air (PCP) Act, 1981.

Ref : Your letter No. MD/ENV/317/110/2010, Dtd. 23/10/2010

Consent to operate is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed thereunder to

Name of the Industry Katamati Iron Ore Mines (Tata Steel Ltd)Name of the Occupier & Designation Rajesh Patel, Head (Planning) OMOAddress At/Po - Joda, Dist - KeonjharThis consent order is valid for the period up to 31.03.2011

This consent order is valid for the product quantity, specified outlets, discharge quantity and quality, specified chimney/stack, emission quantity and quality of emissions as specified below. This consent is granted subject to the general and special conditions stipulated therein.

This order supersede earlier consent order issued vide letter No. 6570, dtd. 24/3/2007 & No. 6572, dtd. 24/3/2007.

A. Details of Products Manufactured

Sl.No.	Product	Quantity
1.	Iron Ore	8.0 MTPA

**B. Discharge permitted through the following outlet subject to the standard**

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Pre-scribed Standard			
				pH	TSS mg/l	Oil & Grease mg/l	BOD mg/l
01.	Domestic effluent	Septic tank & soak pit	--	5.5 to 9.0	200	--	100
2.	Mine drainage water / surface runoff / other wastewater	Nearby land/ inland surface water	--	5.5 to 9.0	50 (Non-rainy day) 100 (Rainy day)	10	--

C. Emission permitted through the following stack subject to the prescribed standard

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission	Prescribed Standard				
				PM	SO ₂	NO _x		
/								

D. Disposal of solid waste permitted in the following manner

Sl. No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site(TPD)	Quantity disposed off (TPD)	Description of disposal site.
01.	Top Soil / Overburden	As per approved mining plan	--	--	--	As per approved mining plan

E. GENERAL CONDITIONS FOR ALL UNITS

1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alteration or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review/variation/revocation of the consent order under section 27 of the Act of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
2. The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / and products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
3. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law/Act.
5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
7. This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
8. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
9. An inspection book shall be opened and made available to Board's Officers during the visit to the factory.
10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
11. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been tapped by the consumer for utilization for any purposes whatsoever.
12. Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below:
 - a) Industrial cooling, spraying in mine pits or boiler feed,
 - b) Domestic purpose
 - c) Process
13. The applicant shall display suitable caution board at the place where the effluent is entering into any water-body or any other place as indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
14. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
15. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
16. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
17. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
18. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
19. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
20. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfactory treatment and disposal measures.
21. The sludge from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank.
22. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
23. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
24. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.



25. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
26. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
27. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner and to ion of standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended).
28. The stack monitoring system employed by the applicant shall be opened for inspection to this Board at any time.
29. There shall not be any fugitive or episodal discharge from the premises.
30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.
31. The applicant shall keep the premises of the industrial plant and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times.
32. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board by fax / speed post within 24 hours of its occurrence.
33. The industry has to ensure that minimum three varieties of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
34. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as no to cause fugitive emission, dust problems through leaching etc., of any kind.
35. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by
- i) Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
 - ii) Controlled incineration, wherever possible in case of combustible organic material.
 - iii) Composting, in case of bio-degradable material.
36. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
37. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
38. The applicant, his/hers/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
39. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
40. Notwithstanding anything contained in this conditional letter of consent, the Board ~~may~~ reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
41. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
42. In case the consent fee is revised upward during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.
43. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate.

GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs 50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A).

1. The applicant shall analyse the emissions every month for the parameters indicated in TABLE B & C as mentioned in this order and shall furnish the report thereof to the Board by the 10th of the succeeding month.
2. The applicant shall provide and maintain at his own cost three ambient air quality monitoring stations for monitoring Suspended Particulate Matter, Sulphur Dioxide, Oxides of Nitrogen, Hydro-Carbon, Carbon-Monoxide and monitor the same once in a day/week/fortnight/month. The data collected shall be maintained in a register and a monthly extract be furnished to the Board.
3. The applicant shall provide and maintain at his own cost a meteorological station to collect the data on wind velocity, direction, temperature, humidity, rainfall, etc. and the daily reading shall be recorded and the extract sent to the Board once in a month.



4. The applicant shall forward the following information to the Member Secretary, State Pollution Control Board, Orissa, Bhubaneswar regularly
- Report of analysis of stack monitoring, ambient air quality monitoring meteorological data as required every month.
 - Progress on planting of trees quarterly.
5. The applicant shall install mechanical composite sampling equipment and continuous flow measuring / recording devices on the effluent drains of trade as well as domestic effluent. A record of daily discharge shall be maintained.
6. The following information shall be forwarded to the Member Secretary on or before 10th of every month
- Performance / progress of the treatment plant
 - Monthly statement of daily discharge of domestic and/or trade effluent.
7. **Non-compliance with effluent limitations**
- If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification:
 - Causes of non-compliance
 - A description of the non-compliance discharge including its impact on the receiving waters
 - Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance
 - Steps taken by the applicant to reduce and eliminate the non-complying discharge and
 - Steps to be taken by the applicant too prevent the condition of non-compliance
 - The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
 - Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
8. The applicant shall at his own cost get the effluent samples collected both before and after treatment and get them analysed at an approval laboratory every month for the parameters indicated in Part-D and shall submit in duplicate the report thereof to the Board.
9. The addition of various treatment chemicals should be done only with mechanical dosers and proper equipment for regulation of correct dosages determined daily and for proper uniform feeding. Crude practices such as dumping of chemicals in drains or sumps or trickling of acids or alkalis arbitrarily and utilizing poles for string etc. should not be resorted to.
10. In the disposal of treated effluent on land for irrigation, the industry shall keep in view of the need for:
- Rotation of crops
 - Change of point of application of effluent on land
 - A portion of land kept fallow.
11. The adoption of these would avoid soil becoming sick or stale, the industry may ensure this in consultation with the Agriculture Department.
12. It is the sole responsibility of the industry to ensure that there are no complaints at any time from the royats in the surrounding areas as a result of discharge of sewage or trade effluent if any.
13. Proper house keeping shall be maintained by a dedicated team.
14. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.

**F. SPECIAL CONDITIONS :**

- 1) Grant of consent to operate order is subject to grant of forest clearance under the Forest (Conservation) Act, 1980 from the competent authority.
- 2) Grant of consent to operate is subject to clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- 3) A copy of the annual return (annual return submitted to IBM, Govt. of India/ Directorate of Mines, Govt. of Orissa) shall be submitted every year.
- 4) The environmental statement report shall be submitted to the Board in proper format every year.
- 5) Drills shall either be operated with dust extractors or equipped with water injection system.
- 6) Controlled blasting shall be practiced. No blasting shall be carried out after the sunset.
- 7) The top soil shall be stored at earmarked site (s) only and stabilized or shall be used for land reclamation and plantation.
- 8) The over burden generated during the course of mining shall be stacked at earmarked dump site (s) and stabilized or used for reclamation of excavated land followed by plantation.
- 9) The project proponent shall ensure that no natural water course and / or water resources are obstructed due to any mining operations.
- 10) Catch dams with siltation ponds shall be constructed at appropriate places of the mine lease area to prevent run off of water and flow of sediment directly into nearby water bodies. The water so collected shall be utilized for watering the mine area, roads, green belt development etc.
- 11) Retention wall shall be constructed at the toe of topsoil dump and OB dump. Garland drain shall be constructed around topsoil dumps, over burden dumps and mineral dumps terminating at settling pit to prevent run off of water and flow of sediments directly into nearby water bodies. Garland drain and sedimentation pit shall be desilted at regular intervals.
- 12) Regular water sprinkling shall be carried out in critical areas prone to air pollution such as around crushing and screening plant. Water sprinkling shall be carried out on haul roads at desired intervals. Adequate sprinkling arrangement shall be made for control of fugitive dust emission.
- 13) Mineral handling plant (crusher, screening plant and beneficiation plant) shall be provided with adequate number of high efficiency dust extraction system or dust suppression system preferably dry fog system. Loading the unloading areas including all the transfer points shall also have efficient dust suppression arrangements. These shall be properly maintained and operated. The tailings generated from the beneficiation plant shall be disposed of in a pond of adequate size.
- 14) The mine shall take necessary action for compliance of the following air and water quality standards. Emission and wastewater quality monitoring shall be

done by the lessee twice in a week and report shall be submitted once in six months to the Board.

Industry	Parameters	Standard
Iron ore mining & ore processing	A. Emission standards for stack for De-dusting unit	
	Particulate matter	100mg/Nm ³
	Stack height **	15.0m
	** Stack height for De-dusting unit shall be calculated as $H=74 Q^{0.27}$, where H and Q are stack height in metre and particulate matter (PM) emission in tonne / hr respectively, i.e.,	
	Q (kg/hr)	H (metre)
	Up to 2.71	15
	2.72-7.86	20
	7.87-17.96	25
	17.97-35.29	30
	Note : - Stack attached to De-dusting unit shall have minimum height of 15.0 meters and would be atleast 2.50 meters above the top-most point of the nearby building / shed or plant in the mine	
	B. Fugitive Emission Standards	
	Particulate Matter	1200 µg/m ³
	Note : Fugitive emission shall be monitored in the predominant downwind direction at a distance 25.0 ± 2.0 metres from the source of fugitive emission as per following :	
	Area	Monitoring Location
Mine face / Benches	Drilling, excavation and loading applicable for operating benches above water table	
Haul Roads/ Service Roads	Haul roads to ore processing plant, waste dumps and loading areas and service road.	
Crushing plant	Run-off mine unloading at hopper, crushing areas, screens and transfer points.	
Screening plant	Screens, conveying and transportation of ore discharge points.	
Ore storage and loading	Intermediate stock bin / pile areas, ore stock bin / pile areas, wagon / truck loading areas.	
Water dump	Active waste / reject dumps	
C. Effluent Standards		
pH	5.5-9.0	
Suspended solids (non-rainy day)	50 mg/l	
Suspended solids (rainy day)	100 mg/l	
Oil & Grease	10 mg/l	
Note : (i) All efforts shall be made to reuse and re-circulate the treated effluent. (ii) The aforesaid effluent standards shall be complied with for sewage, service water, beneficiation of ore wash water and surface run-off put together"		



- 15) Adequate **Ambient Air Quality Monitoring Stations** shall be established and location of the stations shall be decided based on the metrological data, topographical features and environmentally and ecologically sensitive targets in consultation with the Regional Officer, State Pollution Control Board.
- 16) **Monitoring of Ambient Air Quality** of the mine shall be done twice in a week (24 hourly) **at a particular site** and data shall be submitted to the State Pollution Control Board, once in six months.
- 17) It shall be ensured that the **Ambient Air Quality Parameters** conform to the norms prescribed for Industrial Area (**prescribed in the consent order**).
- 18) Regular monitoring of water quality of upstream and downstream of the nearby water bodies if any shall be carried out and record of monitored data shall be maintained and submitted to the State Pollution Control Board once in every year.
- 19) Appropriate mitigative measures shall be taken to prevent pollution of the nearby water bodies.
- 20) Sewage treatment plant shall be installed for the colony if any. Other domestic wastewater shall be discharged to soak pit through septic tank constructed as per BIS specification.
- 21) ETP shall also be provided for the wastewater generated during the mining operation. Oil and grease trap with sedimentation pit shall be provided for treatment of workshop effluent.
- 22) Measures shall be taken for control of noise levels below 85 dBA in the work environment.
- 23) Mine shall abide-by the Environment (Protection) Act, 1986 and rules framed thereunder.
- 24) Plantation shall be raised around the mining lease, backfilled and reclaimed area, around crusher, screen, beneficiation plant, roads etc. by planting the **native species** in consultation with the local DFO/ Agriculture Department.
- 25) The mine shall submit a declaration by 30th April every year that all pollution control systems are in good condition, operated and emission / air quality / ambient air quality and wastewater quality conform to the prescribed standards.



- 26) Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and other action as deemed fit.

The occupier must comply with the conditions stipulated in section A,B,C,D,E and F to keep this consent order valid.

To,

The Manager,
Katamati Iron Mine, TISCO, Mines Division,
Noamundi - 833 217,
Singhbhum, West- Jharkhand

S.Sai
22/11
MEMBER SECRETARY

STATE POLLUTION CONTROL BOARD, ORISSA

Memo No. _____ /Dt.

Copy forwarded to :

- i) Regional Officer, State Pollution Control Board, Keonjhar
- ii) District Collector Keonjhar
- iii) D.F.O Keonjhar
- iv) Deputy Director of Mines Joda
(For Mines and Minerals Processing Unit only)
- v) Cess Section (Head Office)
- vi) Consent Register

ENV. SCIENTIST

STATE POLLUTION CONTROL BOARD, ORISSA



**GENERAL STANDARDS FOR DISCHARGE OF
ENVIRONMENT POLLUTANTS**

KFM - C.O. 902
CTO for 8MTPA

**GENERAL STANDARDS FOR DISCHARGE OF
ENVIRONMENTAL POLLUTANTS PART -A : EFFLUENTS**

Sl.No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Coastal Areas
		(a)	(b)	(c)	(d)
1.	Colour & odour	Colourless/Odourless as far as practicable	-----	See 6 of Annex-1	See 6 of Annex-1
2.	Suspended Solids (mg/l)	100	600	200	For process wastewater - 100 b. For cooling water effluent 10% above total suspended matter of influent.
3.	Particular size of SS	Shall pass 850	-----	-----	
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	Shall not exceed 5°C above the receiving water temperature	-----	-----	Shall not exceed 5°C above the receiving water temperature
7.	Oil & Grease mg/l max.	10	20	10	20
8.	Total residual chlorine	1.0	----	-----	1.0
9.	Ammonical nitrogen (as N) mg/l max.	50	50	-----	50
10.	Total Kjeldahl nitrogen (as NH ₃) mg/l max.	100	----	-----	100
11.	Free ammonia (as NH ₃) mg/l max.	5.0	----	-----	5.0
12.	Biochemical Oxygen Demand (5 days at 20°C) mg/l max.	30	350	100	100
13.	Chemical Oxygen Demand, mg/l max.	250	----	-----	250
14.	Arsenic (as As) mg/l max.	0.2	0.2	0.2	0.2
15.	Mercury (as Hg) mg/l max.	0.01	0.01	-----	0.001
16.	Lead (as pb) mg/l max.	01.	1.0	-----	2.0



17.	Cadmium (as Cd) mg/l max.	2.0	1.0	-----	2.0
18.	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	2.0	-----	1.0
19.	Total Chromium (as Cr) mg/l max.	2.0	2.0	-----	2.0
20.	Copper (as Cu) mg/l max.	3.0	3.0	-----	3.0
21.	Zinc (as Zn) mg/l max.	5.0	15	-----	15
22.	Selenium (as Se) mg/l max.	0.05	0.05	-----	0.05
23.	Nickel (as Ni) mg/l max.	3.0	3.0	-----	5.0
24.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02
25.	Fluoride (as F) mg/l max.	2.0	15	-----	15
26.	Dissolved Phosphates (as P) mg/l max.	5.0	-----	-----	-----
27.	Sulphide (as S) mg/l max.	2.0	-----	-----	5.0
28.	Phenolic compounds as (C ₆ H ₅ OH) mg/l max.	1.0	5.0	-----	5.0
29.	Radioactive materials a. Alpha emitter micro curie/ml. b. Beta emitter micro curie/ml.	10 ⁷ 10 ⁶	10 ⁷ 10 ⁶	10 ⁸ 10 ⁷	10 ⁷ 10 ⁶
30.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
31.	Manganese (as Mn)	2 mg/l	2 mg/l	-----	2 mg/l
32.	Iron (Fe)	3 mg/l	3 mg/l	-----	3 mg/l
33.	Vanadium (as V)	0.2 mg/l	0.2 mg/l	-----	0.2 mg/l
34.	Nitrate Nitrogen	10 mg/l	-----	-----	20 mg/l



NATIONAL AMBIENT AIR QUALITY STANDARDS

No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO ₂), µg/m ³	Annual * 24 Hours **	50 80	20 80	-Improved west and Gaeke - Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO ₂), µg/m ³	Annual * 24 Hours **	40 80	30 80	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence
3.	Particulate Matter (size less than 10µm) or PM ₁₀ µg/m ³	Annual * 24 Hours **	60 100	60 100	-Gravimetric - TOEM - Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or PM _{2.5} µg/m ³	Annual * 24 Hours **	40 60	40 60	-Gravimetric - TOEM - Beta Attenuation
5.	Ozone (O ₃) µg/m ³	8 Hours ** 1 Hours **	100 180	100 180	- UV Photometric - Chemiluminescence - Chemical Method
6.	Lead (Pb) µg/m ³	Annual * 24 Hours **	0.50 1.0	0.50 1.0	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper. - ED-XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m ³	8 Hours ** 1 Hours **	02 04	02 04	- Non Dispersive Infra Red (NDIR) Spectroscopy
8.	Ammonia (NH ₃) µg/m ³	Annual* 24 Hours**	100 400	100 400	-Chemiluminescence - Indophenol Blue Method
9.	Benzene (C ₆ H ₆) µg/m ³	Annual *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)-Particulate phase only, ng/m ³	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), ng/m ³	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni),ng/m ³	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

** Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Annexure-XV**Surface Water Flow Rate Moniotring Report**

BALIJHARAN NALLA			JOJO NALLA		
Oct-25	Cu.m/hr	249	Oct-25	Cu.m/hr	481
Nov-25	Cu.m/hr	250.57	Nov-25	Cu.m/hr	380.25
Dec-25	Cu.m/hr	232.2	Dec-25	Cu.m/hr	275.42
Jan-26	Cu.m/hr	210.54	Jan-26	Cu.m/hr	252.34
Feb-26	Cu.m/hr	195.84	Feb-26	Cu.m/hr	210.15
Mar-26	Cu.m/hr	208.54	Mar-26	Cu.m/hr	228.5

Environment Expenditure Katamati Iron Mine of Tata Steel Limited For the period April 2025 to March 2026		
Sl No.	Activities	Expenses in Lakh
1	Deployment of Mobile water tankers	109.32
2	Maintenance of DFDS in Crushing & Screening Plants	6.20
3	Maintenance of fixed water sprinklers	8.53
5	Maintenance of CAAQMS	28.80
6	Construction of RWH ponds in villages	12.00
7	Greenbelt development	62.55
8	Water recycling, Cleaning of garland drain & settling pits, Toe wall extension, HEMM maintenance and Housekeeping	193.52
9	Installation of online noise monitoring system	0.60
10	Environment Monitoring	8.85
11	Dump stabilization	28.39
12	Back filling	2293.51
13	Scientific study	34
	Sub Total	2786.27

TATA STEEL



NOTICE

Vide MoEF letter No. **J-11015/63/2008 - IA, II (M)** dated 26th November 2010, Katamati Iron Mine of M/S. Tata Steel Ltd. has been granted environmental clearance for its expansion project to increase Iron Ore production from 2.0 Million TPA to 8.0 Million TPA. The copy of the clearance letter is available with the State Pollution Control Board, Odisha and also at website of the MoEF at <http://envfor.nic.in>

NEW INDIA EXPRESS - 02/12/10
~~प्रदेशीय प्रदूषण नियंत्रण बोर्ड~~

TATA STEEL



ସୂଚନା

ଭାରତ ସରକାରଙ୍କ ଜଙ୍ଗଲ ଓ ପରିବେଶ ମନ୍ତ୍ରାଳୟର ଚିଠି ସଂଖ୍ୟା J-11015/63/2008 - IA. II (M) ତା: ୨୭/୧୧/୨୦୧୦ ଦ୍ୱାରା ଟାଟା ଷ୍ଟିଲ ଲିମିଟେଡ୍‌ର କାଟାମାଟି ଖଣିରୁ ବାର୍ଷିକ ୨.୦ ନିୟୁତ ଟନରୁ ୮.୦ ନିୟୁତ ଟନକୁ ଲୁହାପଥର ଖନନର ଉତ୍ପାଦନ କ୍ଷମତା ବଢ଼ାଇବା ପାଇଁ ପରିବେଶ ମଞ୍ଜୁରୀ ପ୍ରଦାନ କରାଯାଇଅଛି । ଏହି ପରିବେଶ ମଞ୍ଜୁରୀର ନିର୍ଦ୍ଦିଷ୍ଟ ପ୍ରକୃଷଣ ନିୟନ୍ତ୍ରଣ ବୋର୍ଡ, ଓଡ଼ିଶାଙ୍କ ଅଧିକ୍ଷକ ଓ ଜଙ୍ଗଲ ଓ ପରିବେଶ ମନ୍ତ୍ରାଳୟର website: <http://envfor.nic.in> ରେ ଉପଲବ୍ଧ ।

PRAGATI VADI - 02/2/10

110

(This Document Contains Pages)



BY REGISTERED POST WITH A.D.

STATE POLLUTION CONTROL BOARD, ORISSA

Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII, Bhubaneswar - 751 012

6845

CONSENT ORDER

No. 114 APC/

Dated 30.3.06

No. SPCB/BBSR-I-IND (CON) - 185

Sub : Consent for Existing / New operation of the plan under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981.

Ref. : Your Application No. dtd. 23.11.2005

CONSENT is hereby granted under Section 21 of the Air (Prevention and Control of Pollution) Act, 1983 (Central Act 14 of 1981) (hereinafter referred to as "The Act") and the rules and orders made thereunder to M/s Tata Steel Mines, Katamati Iron Ore Mines represented

through its occupier Mr/Ms M. G. Thomas Designation Agent
Address Keonjhar

(hereinafter referred to as "The Applicant") authorising him/her/them to operate his/her/their industrial plant in the Air Pollution Control area as notified by the Government and to continue to make existing discharge of emissions / make new discharge of emissions from the stacks / chimneys.

This Consent is subject to the provision of the Act and the rules and orders made thereunder and is further subject to the product quantity, specified chimney/stack, discharge and quality of emissions as specified below. This Consent is also subject to special condition, ambient air quality (Annexure-I) and General Conditions (Annexure-II)

The CONSENT is valid for the period ~~from~~ up to 31.03.2006

(A) DETAILS OF PRODUCTS MANUFACTURED

Sl.No.	Description	Quantity
1.	Iron Ore.	2.0 Million Tonne/ Annum.
2.	-	
3.	-	
4.	-	
5.	-	

Contd.Pg/2

B. EMISSION IS PERMITTED THROUGH THE FOLLOWING CHIMNEYS / STACKS

Chimney/Stack No.	Description of Chimney / Stack	Point of Discharge (Height)

C. THE DAILY DISCHARGE OF EMISSIONS THROUGH THE FOLLOWING CHIMNEYS/ STACKS SHALL NOT EXCEED THE FIGURES MENTIONED BELOW :

Sl. No.	Chimney/Stack No.	Description of Chimney/Stack	Maximum Discharge M ³ /Hour

D. THE EMISSION SHALL NOT CONTAIN CONSTITUENTS IN EXCESS OF THE TOLERANCE LIMITS AS LAID DOWN HERE UNDER.

Sl No	Parameters	Unit	Limit Prescribed					
			Chimney / Stack Number					
(1)	(2)	(3)	1	2	3	4	5	6
1.	Co ₂							
2.	CO							
3.	Nox							
4.	Particulate matter							
5.	Others							


Contd. Pg/3

E. SPECIAL CONDITIONS

1. Adequate dust suppression measures like water spraying arrangement shall be provided at transportation road, stack yard of products & other dust generating points to suppress fugitive dust emission.
2. Drilling machine shall be wet operated with dust excavators, and controlled blasting shall be practiced.
3. Wetting of surface of active OB dumps shall be done to prevent dust by wind action.
4. Ambient air quality shall be maintained to conform to the NAAQMs for industrial area prescribed under EP Act, 1986.
5. The OB material before reclamation shall be dumped in such a manner there shall be least damage to the natural forest cover.
6. In no case slope of the OB dump shall exceed the angle of repose.
7. Broad thick leaf indigenous trees shall be planted along the side of haulage road, over & around OB dumps, over reclaimed pits, in residential colony and vacant space where ever available @ 10000 trees per Acre.
8. Iron Ore crusher within the premises shall not be established without the prior permission from the Board.
9. The mine shall abide by EP Act, 1986 & rules framed there under.

To

..... The Chief Planning (OMQ),
..... M/s. Tata Steel ~~ktk~~ Mines,
..... Katamati Iron Ore Mines,
..... Mine Divn., Nuamundi - 833 217,
..... Dist: Singhbun-West, Jharkhand.
.....


MEMBER SECRETARY

STATE POLLUTION CONTROL BOARD, ORISSA

:: 4 ::

Memo No. / Dt. /

- i) Secretary, Department of Forest & Environment, Government of Orissa.
- ii) Secretary, Industries Department, Government of Orissa.
- iii) Regional Officer, State Pollution Control Board Keerihar
- iv) Cess Section (Head Office)
- v) Guard File (Head Office)
- vi) EIA cell / Awareness cell

SR. ENV. ENGINEER / ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ORISSA

The State Pollution Control Board,
Bhubaneswar, Orissa.
The Regional Officer,
State Pollution Control Board,
Keerihar, Orissa.

STATE POLLUTION CONTROL BOARD,
Bhubaneswar, Orissa.

ANNEXURE - I

AMBIENT AIR QUALITY STANDARDS

Pollutant	Time Weighted Average	Concentration in Ambient Air			Method of Measurement
		Industrial Area	Residential Rural & Other	Sensitive Area	
1	2	3	4	5	6
Sulphur Dioxide (SO ₂)	Annual Av.	80 µg/m ³	60 µg/m ³	15/ µg/m ³	1. Improve West and Gaeke method 2. Ultraviolet fluorescence
	24 Hours	120 µg/m ³	80 µg/m ³	30 µg/m ³	
Oxides of Nitrogen as NO ₂	Annual Av.	80 µg/m ³	60 µg/m ³	15 µg/m ³	1. Jacob & Hcchheiser Modified) (Na-Argenite Method) 2. Gas Phase Chemiluminescence
	24 Hours	120 µg/m ³	80 µg/m ³	30 µg/m ³	
Suspended Particulate Matter (SPM)	Annual Av.	360 µg/m ³	140 µg/m ³	70 µg/m ³	Avg. flow rate not less than 1.1 m ³ /minute
	24 Hours	500 µg/m ³	200 µg/m ³	100 µg/m ³	
Respirable Particulate Matter (Size less than 10 µm) (RPM)	Annual Avg.	120 µg/m ³	60 µg/m ³	50 µg/m ³	
	24 Hours	150 µg/m ³	100 µg/m ³	75 µg/m ³	
Lead (Pb)	Annual Avg.	1.0 µg/m ³	0.75 µg/m ³	0.50 µg/m ³	..ASS Method after sampling using EPM 2000 of equivalent filter paper.
	24 Hours	1.5 µg/m ³	1.0 µg/m ³	0.75 µg/m ³	
Carbon Monoxide (Co)	8 Hours	5.0 µg/m ³	2.0 µg/m ³	1.0 µg/m ³	.. Non dispersive Infrared spectroscopy
	1 Hour	10.0 µg/m ³	4.0 µg/m ³	2.0 µg/m ³	

* Annual Arithmetic mean of minimum 104 measurements in a year taken twice a week 24 hourly at uniform interval.

** 24 hourly / 8 hourly values should be met 98% of the time in a year. However, 2% of the time, it may exceed but not on two consecutive days.

ANNEXURE - II

GENERAL CONDITIONS

1. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
2. The applicant shall analyse the emissions every month for the parameters indicated in the No.4(a) and shall furnish in triplicate the report thereof to the Board by the 10th of the succeeding month.
3. This Consent is given by the Board in consideration of the particulars given in the application. Any change or alteration or deviation made in actual practice from the particulars furnished in the application will also be ground for review / variation / revocation of the Consent Order under Section 21 of the Act to make such deviations as deemed fit for the purpose of the Act.
4. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and / or quantity of emissions, without the previous written permission of the Board.
5. The applicant shall provide and maintain at his own cost one/two/three ambient air quality monitoring stations for monitoring Suspended Particulate Matter, Sulphur Dioxide, Oxides of Nitrogen, Hydro-Carbon, Carbon-Monoxide and monitor the same once in a day/week/fortnight/month. The data collected shall be maintained in a register and a monthly extract be furnished to the Board.
6. The applicant shall provide and maintain at his own cost a meteorological station to collect the data on wind velocity, direction, temperature, humidity, rainfall, etc. and the daily reading shall be recorded and the extract sent to the Board once in a month.
7. The applicant shall forward the following information to the Member Secretary State Pollution Control Board, Orissa, Bhubaneswar regularly before 10th of every month.
 - (a) Progress on installation of air pollution control equipments.
 - (b) Progress on the procurement and installation of equipments for monitoring ambient air quality, stacks/chimneys and meteorological data.
 - (c) Monthly extract of daily discharge of emission through each chimney/stack.

- (d) Report of analysis of stack monitoring, ambient air quality monitoring, meteorological data as required under conditions as serial 4 of Consent Order.
- (e) Progress on planting of trees and plants as referred to under General Conditions No.4.
- 8. Any upset condition in any of the plant / plants of the factory which is likely to result in increased emissions and/or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board telegraphically.
- 9. The applicant shall furnish to the Visiting Officer of the Board any information regarding the stack monitoring system/or operation of the plant or any other particulars as may be pertinent in preventing and controlling of pollution of Air.
- 10. The applicant shall submit process flow sheet and particulars of proposed control equipments monitoring equipments and time schedule for completing the installation of the same as to reach the Board within 30 days from the date of receipt of this consent.
- 11. The conditions imposed as above shall continue in force until revoked under Section 21 of the Act.
- 12. The applicant shall make an application for grant of fresh consent atleast 90 days before the date of expiry of this consent orders.
- 13. The necessary fee, as prescribed for obtaining consent, shall be paid for by the applicant along with the application for consent.
- 14. The industry shall immediately submit the revised application for consent to this Board in the event of any change in the quantity/quality of raw material, manufacturing process, rate of emissions, air pollution control equipments etc.
- 15. The applicant shall :
 - (a) **Not later than 30 days** from the date of issue of this consent order certify in writing to the Member Secretary that the applicant has installed or provided for an alternate electric power source sufficient to operate all facilities installed by the applicant to maintain compliance with the terms and conditions of the consent.
 - (b) **Not later than 30 days** from the date of issue of this consent certify in writing to the Member Secretary that upon the reduction, loss or failure of one or more of the primary sources of electric power to any facilities installed by the applicant to maintain compliance with production and/or all emissions in order to maintain compliances with the terms and conditions of this consent.

16. No. Control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
17. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner and to the satisfaction of standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as ammended).
18. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as not to cause fugitive emission, dust problems through leaching etc., of any kind.
19. The applicant shall plant a minimum of three varieties of trees at the density of not less than 1000 trees per acre. This plantation is situated over and above the bulk plantation of trees in that area and maintain them.
20. The applicant shall provide all facilities for collection of sample to the Board staff.
21. The stack monitoring system employed by the applicant shall be opened for inspection to this Board at any time.
22. There shall not be any fugitive or episodal discharge from the premises.
23. In case of such episodal discharge / emissions the industry*shall take immediate action to bring down the emission within the limits prescribed by the Board in condition.
24. The applicant shall at all times maintain in good working order and operate as efficiently as possible all pollution control facilities to achieve the terms and conditions of the consent.
25. The issue of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorise any injury to private properly or any invasion of personal rights, or any infringement of Central, State laws or regulations.
26. The applicant shall keep the premises of the industrial plant and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times.

27. The applicant shall display this consent granted to him in a prominent place for perusal of the inspecting officers of this Board.
28. An inspection book shall be opened and made available to Board's Officers during the visit to the factory.
29. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
30. The applicant, his heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
31. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
32. Any change in occupier shall be informed to the Board forthwith.



STATE POLLUTION CONTROL BOARD, ORISSA

Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII, Bhubaneswar - 751 012

No. **114** WPC/

Dated **30-3-06**

No. **6847** **CONSENT ORDER**
SPCB/BBSR-I-IND (CON) - 185

Sub : Consent for discharge of Sewage and / or trade effluent under section 25/26 of water (prevention & control of pollution) Act, 1974

Ref : Your Application No. ----- dtd. **23.11.2005**

CONSENT is hereby granted under Section 25/26 of the Water (PCP) Act, 1974 (Central Act 6 of 1974) hereinafter referred to as the Act and the rules and orders made thereunder to M/s **Tata Steel Mines, Katamati Iron Ore Mines** represented through its occupier Mr/Ms **M. C. Thomas** Designation **Agent** Address **Keonjhar** (hereinafter referred as "the applicant") authorising him/her to continue to or bring into use any new or altered outlet or begin to make any new discharge of sewage and/or trade effluent.

This Consent is subject to the provision of the Act and the rules and orders thereunder and further subject to the product capacity, specified outlet/outlets, discharge quantity and quality and special conditions mentioned therein. This Consent is also subject to the general conditions (Annexure-I) and general standard for discharge of pollutants (Effluents) (Annexure-II)

The CONSENT is valid for the period from **01.03.2006** up to **31.03.2006**

(A) DETAILS OF PRODUCTS MANUFACTURED

Sl.No.	Description	Quantity
1.	Iron Ore.	2.0 Million Tonne/Annum.
2.	-	
3.	-	
4.	-	
5.	-	

B. DISCHARGE OF EFFLUENT PERMITTED FROM THE FOLLOWING OUTLETS

Outlet No.	Description of the Outlet	Point of Discharge
1.		
2.		
3.		
4.		
5.		

C. QUANTITY OF EFFLUENT DISCHARGED NOT TO EXCEED THE FIGURES MENTIONED BELOW.

Outlet No.	Maximum hourly discharge (lit/hr.)	Maximum Daily Discharge (lit/day)
1.		
2.		
3.		
4.		
5.		

D. EFFLUENT DISCHARGED SHALL NOT CONTAIN CONSTITUENT IN EXCESS OF THE FOLLOWING AS LAID DOWN HEREUNDER. (Parameters not mentioned here shall be referred to the General Standards Annexed)

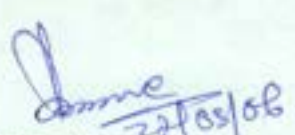
Sl. No.	Parameters	Unit	Limit Prescribed				
			Outlet 1	Outlet 2	Outlet 3	Outlet 4	Outlet 5
1.							
2.							
3.							
4.							
5.							
6.							

D. SPECIAL CONDITIONS

1. The topsoil shall be stacked properly with proper slope at earmarked site with adequate measures and shall be used for reclamation of mined out area.
2. The min~~w~~ water (if any) and surface ~~run~~ off from the OB dumps area shall be treated in a settling tank and conform to the prescribed standard before discharge to nearby water body.
3. Catch drains & siltation ponds of appropriate size shall be constructed to arrest silt and sediment flow from soil, OB & mineral dumps. The drains shall be regularly desilted & maintained properly.
4. The sludge excavated from the tailing pond shall be properly disposed off in order to avoid surface water contamination.
5. Garland drain / ~~xxx~~ check dam shall be constructed around OB dump and run off collected ~~be~~ shall be treated in settling to conform to the prescribed standard before discharge to inland surface water.
6. Effluent generated from workshop (if any) shall be treated in O&G trap cum sedimentation tank before discharge to inland surface water.
7. Domestic effluent shall be discharged to soak pit via septic tank constructed as per BIS specification.
8. Pitch / terracing / matting of toe of OB dump shall be done to chek erosion of dumps.
9. The mined out areas shall be technically & biologically reclaimed.

To

..... The Chief Planning (OMQ)
..... M/s. Tata Steel Mines,
..... Katamati Iron Ore Mines,
..... Mines Division, Nuamundi - 833 217
..... Dist: Singhbhum-West, Jharkhand.
.....


MEMBER SECRETARY

STATE POLLUTION CONTROL BOARD, ORISSA

Contd Pg/4

Memo No. / Dt.

- i) Secretary, Department of Forest & Environment, Government of Orissa
- ii) Secretary, Industries Department, Government of Orissa
- iii) Regional Officer, State Pollution Control Board *Kesav Kumar*
- iv) Cess Section (Head Office)
- v) Guard File (Head Office)
- vi) EIA cell / Awareness cell

SR. ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ORISSA

VIC 233 - 233 214
Khandra Division, Khandra - 751 001
Dist: Singhbhum, Jharkhand

ANNEXURE - I
GENERAL CONDITIONS

1. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been tapped by the consumer for utilisation for any purposes whatsoever.
2. Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below :
 - (a) Industrial cooling, spraying in mine pits or boiler feed.
 - (b) Domestic purpose
 - (c) Process
 - (d)
 - (e)
3. The applicant shall install mechanical composite sampling equipment and continuous flow measuring/recording devices on the effluent drains of trade as well as domestic effluent. A record of daily discharge shall be maintained.
4. The consent given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review / variation / revocation of the consent order under Section 27 of the Act and to make such variations as deemed fit for the purpose of the Act.
5. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
6. The applicant shall comply with and carry out directives / orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. The applicant shall be liable for such legal action as per provisions of the Law/Act in case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order.

7. The following information shall be forwarded to the Member Secretary on or before 10th of every month.
 - (a) Performance/progress of the treatment plant.
 - (b) Status of the installation of mechanical composite sampling equipment and continuous flow recording and measuring devices.
 - (c) Monthly statement of daily discharge of domestic and/or trade effluent.
8. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge and/or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board telegraphically.
9. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system and any other particulars as may be pertinent to preventing and controlling pollution of water.
10. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under Section 27(2) of the Water (Prevention and Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
11. The conditions imposed as above shall continue to be in force until revoked under Section 27(2) of the Act.
12. The industry has to ensure that minimum three varieties of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the Industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
13. The applicant shall make an application for grant of fresh consent atleast 90 days before the date of expiry of this consent order.
14. The industry would immediately submit revised application for consent to this Board in the event of any change in the quantity and quality of raw material/and products/manufacturing process or quantity/quality of the effluent etc.

15. The applicant shall display suitable caution board at the place where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
16. The applicant shall either :
 - (a) **Not later than 30 days** from the date of issue of this consent order certify in writing to the Member Secretary that the applicant has installed or provided for an alternate electric power source sufficient to operate all facilities installed by the applicant to maintain compliance within the terms and conditions of the consent.
 - (b) **Not later than 30 days** from the date of this consent certify in writing to the Member Secretary that upon the reduction, loss or failure of one or more of the primary sources of electric power to any facilities installed by the applicant to maintain compliance with the terms and conditions of this consent, the applicant shall halt, reduce or otherwise control production and/or all discharge in order to maintain compliance with the terms and conditions of this consent.
17. The applicant shall not allow the discharge from other premises to mix with the discharge from his premises.
18. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
19. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
 - i) Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
 - ii) Controlled incineration, wherever possible in case of combustible organic material.
 - iii) Composting, in case of bio-degradable material.
20. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing any burying shall be carried out in the presence of Board's authorised persons only. Letter of authorisation shall be obtained for handling and disposal of hazardous wastes.

21. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
22. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples.
23. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by him to achieve with the term (s) and conditions of the consent.
24. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorise any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
25. This consent does not authorise or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
26. **Non-Compliance with effluent limitations**
 - (a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following informations in writing within 5days of such notification.
 - i) Causes of non-compliance.
 - ii) A description of the non-compliance discharge including its impact on the receiving waters.
 - iii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
 - iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge a
 - v) Steps to be taken by the applicant to prevent the condition of non-compliance.

- (b) The applicant shall take all reasonable steps to minimise any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
 - (c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
27. The diversion or by-pass of any discharge from facilities utilised by the applicant to maintain compliance with the terms and conditions of this consent is prohibited except,
- i) Where it becomes unavoidable to prevent loss of life or severe property damage, or
 - ii) Where excessive storm drainage or run-off would damage any facilities necessary for compliance with the terms and conditions of this consent, the applicant shall immediately notify the Board in writing of each such diversion or by-pass in accordance with the procedure specified as under Item No.26.
28. The applicant shall at his own cost get the effluent samples collected both before and after treatment and get them analysed at an approval laboratory every month for the parameters indicated in Part-D and shall submit in duplicate the report thereof to the Board.
29. The addition of various treatment chemicals should be done only with mechanical dosers and proper equipment for regulation of correct dosages determined daily and for proper uniform feeding. Crude practices such as dumping of chemicals in drains or sumps or tricking of acids or alkalies arbitrarily and utilising poles for stirring etc. should not be resorted to.
30. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilised as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
31. The utilisation of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.

Contd.Pg/6

32. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
33. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the industry must adopt alternate satisfacotry treatment and disposal measures.
34. The sludge from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalisation tank.
35. In the disposal of treated effluent on land for irrigation, the industry shall keep in view of the need for;
 - i) Rotation of crops
 - ii) Change of point of application of effluent on land
 - iii) A portion of land kept fallow

The adoption of these would avoid soil becoming sick or slate, the industry may ensure this in consulation with the Agriculture Department.

36. It is the sole responsibility of the industry to ensure that there are no complaints at any time from the royats in the surrounding areas as a result of discharge of sewage or trade effluent.
37. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
38. The fact of commissioning of the industry shall be intimated to this office in time.
39. Any change in the occupier shall be informed to the Board forthwith.

ANNEXURE - II

General Standards for discharge of environment pollutants Part - A : Effluents

Sl. No.	Parameters	Standards			
		Inland Surface	Public Sewers	Land for Irrigation	Marine Coastal Areas
1	2	3			
		(a)	(b)	(c)	(d)
1.	Colour & Odour	Colourless/Odourless as far as practicable	.....	See 6 of Annex-I	See 6 of Annex-I
2.	Suspended Solids(mg/1)	100	600	200	a. For process waste water - 100 b. For cooling water effluent 10% above total suspended matter of influent.
3.	Particular size of SS	Shall pass 850	.....	.....	a. Footable solids max. 3 mm b. Settleable solids, max 850 microns.
4.	.....	.....	.....	.....	.....
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	Shall not exceed 5°C above the receiving water temperature	.....	.....	Shall not exceed 5°C above the receiving water temperature.
7.	Oil & Grease mg/1 max.	10	20	10	20
8.	Total residual chlorine	1.0	.....	.....	1.0
9.	Ammonical nitrogen (as N) mg/1 max.	50	50	.....	50
10.	Total Kjeldahl nitrogen (as NH ₃) mg/1 max	100	.....	.....	100
11.	Free ammonia (as NH ₃) mg/1 Max.	5.0	.....	.....	5.0
12.	Biochemical Oxygen Demand Demand (5days at 20°C) mg/1 max.	30	350	100	100
13.	Chemical Oxygen Demand, mg/1 max.	250	.....	.....	250

Contd. Pg/8

Contd. Pg/2

General Standards for discharge of effluents

1	2	3			
		(a)	(b)	(c)	(d)
14.	Arsenic (as As) mg/1max.	0.2	0.2	0.2	0.2
15.	Mercury(as Hg)mg/1max.	0.01	0.01	.....	0.01
16.	Lead (as Pb) mg/1max.	0.1	1.0	.....	2.0
17.	Cardmium (as Cd) mg/1 max.	2.0	1.0	.....	2.0
18.	Hexavelent Chromium (as Cr + 6) mg/1 max.	0.1	2.0	.....	1.0
19.	Total Chromium (as Cr) mg/1 max.	2.0	2.0	.....	2.0
20.	Copper (as Cu) mg/1max	3.0	3.0	.....	3.0
21.	Zinc (as Zn) mg/1max.	5.0	15	.....	15
22.	Selenium(as Sc)mg/1max.	0.05	0.05	.....	0.05
23.	Nickel (as Nil) mg/1max.	3.0	3.0	.....	5.0
24.	Cyanide (as CN) mg/1 max.	0.2	2.0	0.2	0.02
25.	Flouride (as F) mg/1max.	2.0	15	.....	15
26.	Dissolved Phosphates (as P) mg/1 max.	5.0	.....	.....	.....
27.	Sulphide (as S) mg/1 max.	2.0	.....	.....	5.0
28.	Phenoile compounds (as C ₆ H ₅ OH) mg/1 max.	1.0	5.0	.....	5.0
29.	Radioactive Materials				
	a. Alpha emitter micro curle/ml	10 ⁷	10 ⁷	10 ⁸	10 ⁷
	b. Beta emitter micro curle/ml.	10 ⁶	10 ⁶	10 ⁷	10 ⁶
30.	Bio-assay test	90% Survival of fish after 96 hours in 100% affluent	90% Survival of fish after 96 hours in 100% effluent	90% Survival of fish after 96 hours in 100% effluent	90% Survival of fist after 96 hours in 100% effluent
31.	Manganese (as Mn)	2 mg/1	2 mg/1	.....	2 mg/1
32.	Iron (as Fe)	3 mg/1	3 mg/1	.....	3 mg/1
33.	Vanadium (as V)	0.2 mg/1	0.2 mg/1	.....	0.2 mg/1
34.	Nitrate Nitrogen	10 mg/1	.....	.....	20 mg/1

These general standards are for parameters other than those mentioned in the main consent order.



STATE POLLUTION CONTROL BOARD, ORISSA

Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII, Bhubaneswar - 751 012

No. 114 WPC/

Dated 30-3-06

CONSENT ORDER

No. 6847 SPCB/BBSR-I-IND (CON) - 185

Sub : Consent for discharge of Sewage and / or trade effluent under section 25/26 of water (prevention & control of pollution) Act, 1974

Ref. : Your Application No. dtd. 23.11.2005

CONSENT is hereby granted under Section 25/26 of the Water (PCP) Act, 1974 (Central Act 6 of 1974) hereinafter referred to as the Act and the rules and orders made thereunder to M/s Tata Steel Mines, Katamati Iron Ore Mines represented through its occupier Mr/Ms N. C. Thomas Designation Agent Address Keonjhar (hereinafter referred as "the applicant") authorising him/her to continue to or bring into use any new or altered outlet or begin to make any new discharge of sewage and/or trade effluent.

This Consent is subject to the provision of the Act and the rules and orders thereunder and further subject to the product capacity, specified outlet/outlets, discharge quantity and quality and special conditions mentioned therein. This Consent is also subject to the general conditions (Annexure-I) and general standard for discharge of pollutants (Effluents) (Annexure-II)

The CONSENT is valid for the period from 01.03.2006 up to 31.03.2006

(A) DETAILS OF PRODUCTS MANUFACTURED

Sl.No.	Description	Quantity
1.	Iron Ore.	2.0 Million Tonne/Annum.
2.	-	
3.	-	
4.	-	
5.	-	

Contd.Pg/2

B. DISCHARGE OF EFFLUENT PERMITTED FROM THE FOLLOWING OUTLETS

Outlet No.	Description of the Outlet	Point of Discharge
1.		
2.		
3.		
4.		
5.		

C. QUANTITY OF EFFLUENT DISCHARGED NOT TO EXCEED THE FIGURES MENTIONED BELOW.

Outlet No.	Maximum hourly discharge (lit/hr.)	Maximum Daily Discharge (lit/day)
1.		
2.		
3.		
4.		
5.		

D. EFFLUENT DISCHARGED SHALL NOT CONTAIN CONSTITUENT IN EXCESS OF THE FOLLOWING AS LAID DOWN HEREUNDER. (Parameters not mentioned here shall be referred to the General Standards Annexed)

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To

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The Chief Planning (OMQ)
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M/s. Tata Steel Mines,
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SR. ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ORISSA

ANNEXURE - I
GENERAL CONDITIONS

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Contd.Pg/2

7. The following information shall be forwarded to the Member Secretary on or before 10th of every month.
 - (a) Performance/progress of the treatment plant.
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 - ii) Change of point of application of effluent on land
 - iii) A portion of land kept fallow

The adoption of these would avoid soil becoming sick or slate, the industry may ensure this in consulation with the Agriculture Department.

36. It is the sole responsibility of the industry to ensure that there are no complaints at any time from the royats in the surrounding areas as a result of discharge of sewage or trade effluent.
37. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
38. The fact of commissioning of the industry shall be intimated to this office in time.
39. Any change in the occupier shall be informed to the Board forthwith.

ANNEXURE - II

General Standards for discharge of environment pollutants Part - A : Effluents

Sl. No.	Parameters	Standards			
		Inland Surface	Public Sewers	Land for Irrigation	Marine Coastal Areas
1	2	3			
		(a)	(b)	(c)	(d)
1.	Colour & Odour	Colourless/Odourless as far as practicable	.....	See 6 of Annex-I	See 6 of Annex-I
2.	Suspended Solids(mg/1)	100	600	200	a.For process waste water - 100 b.For cooling water effluent 10% above total suspended matter of influent.
3.	Particular size of SS	Shall pass 850	.....	.....	a.Footable solids max. 3 mm b.Settleable solids, max 850 microns.
4.	.....	.....	.....	.....	.....
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	Shall not exceed 5°C above the receiving water temperature	.....	.....	Shall not exceed 5°C above the receiving water temperature.
7.	Oil & Grease mg/1 max.	10	20	10	20
8.	Total residual chlorine	1.0	.....	.....	1.0
9.	Ammonical nitrogen (as N) mg/1 max.	50	50	.....	50
10.	Total Kjeldahl nitrogen (as NH ₃) mg/1 max	100	.....	.....	100

1	2	3			
		(a)	(b)	(c)	(d)
14.	Arsenic (as As) mg/1max.	0.2	0.2	0.2	0.2
15.	Mercury(as Hg)mg/1max.	0.01	0.01	.....	0.01
16.	Lead (as Pb) mg/1max.	0.1	1.0	.....	2.0
17.	Cardmium (as Cd) mg/1 max.	2.0	1.0	.....	2.0
18.	Hexavelent Chromium (as Cr + 6) mg/1 max.	0.1	2.0	.....	1.0
19.	Total Chromium (as Cr) mg/1 max.	2.0	2.0	.....	2.0
20.	Copper (as Cu) mg/1max	3.0	3.0	.....	3.0
21.	Zinc (as Zn) mg/1max.	5.0	15	.....	15
22.	Selenium(as Sc)mg/1max.	0.05	0.05	.....	0.05
23.	Nickel (as Nil) mg/1max.	3.0	3.0	.....	5.0
24.	Cyanide (as CN) mg/1 max.	0.2	2.0	0.2	0.02
25.	Flouride (as F) mg/1max.	2.0	15	.....	15
26.	Dissolved Phosphates (as P) mg/1 max.	5.0	.....	.....	.....
27.	Sulphide (as S) mg/1 max.	2.0	.....	.....	5.0
28.	Phenoile compounds (as C ₆ H ₅ OH) mg/1 max.	1.0	5.0	.....	5.0
29.	Radioactive Materials a. Alpha emitter micro curie/ml	10 ⁷	10 ⁷	10 ⁸	10 ⁷
	b. Beta emitter micro curie/ml.	10 ⁶	10 ⁶	10 ⁷	10 ⁶
30.	Bio-assay test	90% Survival of fish after 96 hours in 100% affluent	90% Survival of fish after 96 hours in 100% effluent	90% Survival of fish after 96 hours in 100% effluent	90% Survival of fist after 96 hours in 100% effluent
31.	Manganese (as Mn)	2 mg/1	2 mg/1	.....	2 mg/1
32.	Iron (as Fe)	3 mg/1	3 mg/1	.....	3 mg/1
33.	Vanadium (as V)	0.2 mg/1	0.2 mg/1	.....	0.2 mg/1
34.	Nitrate Nitrogen	10 mg/1	.....	.....	20 mg/1

These general standards are for parameters other than those mentioned in the main consent order.



Chief Conservator of Forests,
Regional Office (Eastern Zone)
Ministry of Environment and Forests,
Government of India
A/3, Chandrasekharpur,
Bhubaneswar - 751 023

Handwritten signature

G2.83/0287/05
14th May 2005

Dear Sir,

Sub: Compliance of Public Notice in the News Paper for Environmental Clearance of Katamati Iron Mine.

Kindly refer to the letter no. J-11015/120/2003.1A.II(M) dated 6.05.2005 from Additional Director, Ministry of Environment and Forests, Government of India, New Delhi granting Environmental Clearance to the Katamati Iron Mine of Tata Steel.

In compliance with the general condition stipulated in the part B (xv) of the above referred clearance letter dated 6.05.2005, we have published the Public Notice in the local newspapers on 12.05.2005 as per details given below:

In English - Sambad dated 12.05.2005
In Oriya - Pragatibadi dated 12.05.2005

We enclose the copies of newspaper clippings of the above notices for your kind perusal.

Thanking you,

Yours faithfully,

S.C. Sahoo

S.C. Sahoo
Resident Executive.

Handwritten signature

Encl:- As above

Copy to: Member-Secretary, State Pollution Control Board, Bhubaneswar for kind information.

Copy to: GM (OMA) with enclosure for information & record.
This is as per your mail dt. 9th May, 2005.

110

Sm-SNM
Pl. photocopy
& file in 110
H.P.

TATA STEEL

The Tata Iron and Steel Company Limited
Office of the Chief Resident Executive 2/3 Bhouma Nagar U.P. IV Bhubaneswar 751 001 India
Tel 91 674 2418125 2513104 Fax 91 674 2513169

ବୋଧିକା

କ୍ୱେଡ଼ିଓର କିଲ୍ଲା (ଓଡ଼ିଶା) ଡିଭିସନ- ବଡ଼ବିଲ, ଗ୍ରାମ- ଦେଓଢ଼ରରେ ଥିବା ଟାଟା ଷ୍ଟଲର
କର୍ମଚାରୀ ଆଇରନ୍ ମାଇଲ୍ସ୍ ଜାଗା ସମ୍ବନ୍ଧରେ, ନୂଆଦିଲ୍ଲୀ ପରିବେଶ ଓ ଜଙ୍ଗଲ
ମନ୍ତ୍ରାଳୟ ପକ୍ଷରୁ ବାର୍ଷିକ ୪.୫ ନିୟୁତ ଟଙ୍କା (ଏମ୍.ଟି.ଏ) ଲୁହାପଥର ଉତ୍ପାଦନ ଆଇଁ.ଟି.
ନଂ-ଜେ-୧୧୦୧୫/୧୨୦/୨୦୦୩-ଆଇ.ଏ.-II (ଏମ୍) ତା.୬.୫.୨୦୦୫ ମାଧ୍ୟମରେ
ପରିବେଶ ମନ୍ତ୍ରାଳୟ ପ୍ରଦାନ କରାଯାଇଛି ।

ପରିବେଶ ମନ୍ତ୍ରାଳୟ ପକ୍ଷରୁ ଏକ ନିଜଲ ରାଜ୍ୟ ପ୍ରକାଶନ ନିୟମଣ ବୋର୍ଡ଼,
ଏ/୧.୧୮, ନାଳକଣ୍ଠ, ନଗର, ଯୁନିଟ୍-୮, ଭୁବନେଶ୍ୱର- ୭୫୧୦୧୨ (ଓଡ଼ିଶା)
ନିଜଗଠେ ରହିଛି । ଏହାକୁ ମଧ୍ୟ ପରିବେଶ ଓ ଜଙ୍ଗଲ ମନ୍ତ୍ରାଳୟର ୱେବସାଇଟ୍ [http://
envfor.nic.in](http://envfor.nic.in) ଜରିଆରେ ଦେଖାଯାଇପାରିବ ।

ପରିବେଶ ଓ ଜଙ୍ଗଲ ବିଭାଗ, ଭାରତ ସରକାର, ନୂଆଦିଲ୍ଲୀ ଉପରୋକ୍ତ ଚିଠିର
ନିର୍ଦ୍ଦେଶନାମା ଅନୁସାରେ ଏହି ବିଜ୍ଞାପନ ପ୍ରକାଶ କରାଗଲା ।

ପ୍ରକାଶକ କର୍ତ୍ତୃପକ୍ଷ,
କଟାମାଟି ଆଇରନ୍ ମାଇଲ୍ସ୍, ଟାଟା ଷ୍ଟଲ

ଖୁସିକାନ୍ତ - ୧୨/୫/୨୦୦୫

NOTICE

Katamati Iron Mine of Tata Steel in Village, Deojhar, Tehsil-Barbil, Keonjhar District (Orissa) has been accorded Environment Clearance by the Ministry of Environment & Forests, Government of India, New Delhi vide their Letter No. J-11015/120/2003-IA, II(M) dated 06.05.2005 for production of 4.5 million tonnes per annum (MTPA).

A copy of the clearance letter is available with the Orissa Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012 (Orissa) and can also be seen at Website of Ministry of Environment & Forests at <http://envfor.nic.in>

This advertisement is published as directed by the Ministry of Environment & Forests, Government of India, New Delhi in the above referred letter.

Project Authority,
Katamati Iron Mine,
Tata Steel

Sambad - 12/5/05

January 20, 2026

Tata Steel Limited & New Merged Entities

Bombay House 24 Homi Mody, Street Fort Mumbai
400001 Mumbai Maharashtra 400001, Mumbai,
Maharashtra-400001
8655924055

Dear Customer,

Sub: Public Liability Insurance (Under PLI Act 1991) Policy No: 3133208123239400000

We thank you for having preferred us for your *Insurance* requirements. We at HDFC ERGO General Insurance believe "**Insurance**" as not only to be an assurance to indemnify in the event of unfortunate circumstances, but one that signifies protection and support, which you can count on when you need it most.

The Insurance Policy enclosed herewith is a written agreement providing confirmation of our responsibility towards you that puts insurance coverage into effect against stipulated perils.

Please note that the policy has been issued based on the information contained in the proposal form and / or documents received from you or your representative / broker.

Name of the Intermediary: Not Applicable

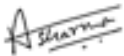
Intermediary Code: Not Applicable

Where the proposal form is not received, information obtained from you or your representative /broker, whether orally or otherwise, is captured in the policy document.

If you wish to contact us in reference to your existing policy and /or other general insurance solutions offered by us, you may write to our correspondence address as mentioned below. Alternatively, you may visit our website www.hdfcergo.com. To enable us to serve you better, you are requested to quote your Policy Number in all correspondences.

Thanking you once again for choosing HDFC ERGO General Insurance Company Limited and looking forward to many more years of association.

Yours sincerely,



Authorised Signatory

Public Liability Insurance (Under PLI Act 1991)

SCHEDULE


Policy No: 3133208123239400000

Item 1. Insured	:	Tata Steel Limited & New Merged Entities
Item 2. Producer	:	Not Applicable
Item 3. Financial Interest	:	Not Applicable
Item 4. Mailing address of the Insured	:	Bombay House 24 Homi Mody, Street Fort Mumbai ꞵ 400001mumbai Maharashtra 400001, Mumbai, Maharashtra, 400001.
Item 5. Pan Card Number	:	AAACT2803M
Item 6. Business	:	Principally including but not limited to: Manufacture of Steel & Steel related finished products (Coils, Sheets, Billets, Pipes, Tubes, Bearings, Wires, growth shops, Agricultural tools tackles & equipment, etc), By-Products, Ferro Chrome & Ferro Manganese, Chrome Ore, Chrome Concentrate (Beneficiated Chrome Ore), Manganese Ore, Mining & Washing of Coal, Iron Ore & Limestone for captive use & Trading, any other related activities including the new activities taken up during the policy period and supporting activities anywhere in India
Item 7. Policy Period	:	From 00:01 hours : 01 January 2026 To (Midnight) : 31 December 2026
Item 8. Premium	:	Rs. 817,500.00
Item 9. Premium & Coverage Statement	:	Refer to Page 2
9.1 Premium Computation		
9.2 Insurance Limits & Excess		
Item 10. Clauses, Conditions & Warranties :		

Form Number	Form Name	Effective Date	Date Issued
PL-02-0032	Policy Schedule	1 January 2026	20 January 2026
PL-02-0031	Insurance Contract	1 January 2026	20 January 2026
PL-02-0038	Co-Insurance Clause	01 January 2026	20 January 2026
XX-XX-XXX2	Endorsment- Sanctions Clause	01 January 2026	20 January 2026
XX-XX-XXX1	Endorsement- PFAS Exclusion	01 January 2026	20 January 2026
4	Arbitration clause - No	01 January 2026	20 January 2026

Subject otherwise to terms and conditions of Public Liability Insurance Policy.

Signed for and on behalf of HDFC ERGO General Insurance Company Limited, on 20 January 2026



Authorised Signatory

GST Registration No: 27AABCL5045N1Z8. The contract will be cancelled ab intio in case; the consideration under the policy is not realized.

The stamp duty of Rs. 0.5/- paid vide Order No:(LOA/ENF-1/CSD/64/2024-25/ Validity Period Dt. 15/10/2024 to Dt. 31/12/2028, OW No. 4742 Dt 04/10/2024 GRN NO. MH007778466202425M, Dt. 10/09/2024, SBI Bank & DEFACE No. 0005045616202425, Dt. 03/10/2024) as prescribed by Government of Maharashtra Notification No. Mudrank 2017/C.R.97/M-1, Dt.09/01/2018

Note: Where the proposal form is not received, information obtained from insured, whether orally or otherwise, is captured in the policy document. Discrepancies, if any, in the information contained in the policy document may be pointed out by an insured within 15 days from the policy issue date after which information contained in the policy document shall be deemed to have been accepted as correct.

I/ We hereby declare that though our aggregate turnover in any preceding financial year from 2017-18 onwards is more than the aggregate turnover notified under sub-rule (4) of rule 48, we are not required to prepare an invoice in terms of the provisions of the said sub-rule

Please note that your communication address is treated as the address for underwriting purposes, which is generally address where you would be currently and temporarily residing, and is different from your permanent address. Details along with the proof for your permanent address is provided either from reference of C-KYC Registry and/or on Aadhaar. Any submission for change in address is treated as change in communication address. Please go to the self-help page or your nearest branch if case you intend to change the 'permanent address' provided.

Branch	Leela Business Park, 6th Flr, Andheri - Kurla Rd, Mumbai, 400059. Tel.: +91-22-66383600
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Warranties :

Warranted that there are no known losses and /or circumstances that may lead to losses or claims under this policy (except the claims and / or circumstances already reported to HDFC ERGO General Insurance Co. Ltd.).

This policy is issued basis the information and representations provided by or on behalf of the insured (whether by way of a proposal form or otherwise), and it is thus warranted that such information/representations are true, accurate, and complete, and that no other material information has been withheld.

If the policy document, schedule or endorsement contains any inadvertent error or omission in regards the information provided to us, you are requested to inform us within 15 days of receipt of the policy document so that we can correct any such error or omission.

This is with reference to the KYC norms prescribed by the Authority, whereby this policy is being issued relying on the undertaking / power of attorney / letter of authorisation / Board resolution provided by the authorized signatory of your Entity. Should the signatory be not authorized to provide such a declaration, please inform the Company within 15 days from the date of receipt of this policy

Warranty-Based on information submitted by you/ your representative to obtain quote/ policy, you have been classified as Non Micro, Small and Medium Enterprise (Non MSME) as per definition published by Min-istry of Micro, Small and Medium Enterprises via extraordinary Gazette notification dated 01st June 2020, effective 01st July 2020.However, in case if you are not falling under definition of MSME as per above stated Gazette notifica-tion, please contact our nearest office / policy issuing branch to get your quote/policy rectified accordingly.

Premium & Coverage Statement

(Item. 9 of Schedule, Attached to and forming part of Policy No: 3133208123239400000)

9.1 Premium Computation

Premium Details	Amount (Rs.)
Net Premium	375,000.00
GST 18% : Central Tax 9% (Rs. 33750) + State Tax 9% (Rs. 33750)	67,500.00
Add: Contribution to Environment Relief Fund	375,000.00
Total Premium	817,500.00
Invoice Number :	6012001050881
GSTN :	27AAACT2803M2ZA
Place of Supply	Maharashtra
SAC Code	997139

9.2 Insurance Limits & Excess

Insurance Limits

Details	Amount (Rs.)
Each Accident Insurance Limit	2,500,000,000.00
Aggregate Insurance Limit	5,000,000,000.00

Excess

Compulsory Excess	Not Applicable
Voluntary Excess	Not Applicable

Public Liability Insurance (Under PLI Act 1991)

1. OPERATIVE CLAUSE

WHEREAS the Insured named in the Schedule hereto and carrying on the business described in the said schedule has applied to HDFC ERGO GENERAL INSURANCE COMPANY LIMITED (hereinafter called 'the Company') for the indemnity hereinafter contained and has made a written proposal and declaration which shall be the basis of this contract and is deemed to be incorporated herein and has paid the premium and statutory contribution towards the Environment Relief Fund as consideration for or on account of such indemnity in accordance with the manner prescribed under Section 64VB of the Insurance Act, 1938 and as per the provisions of the Public Liability Insurance Act and the rules framed there under.

NOW THIS POLICY WITNESSETH that subject to the terms, conditions and exclusions herein contained or endorsed or otherwise expressed herein, to indemnify the Insured or Owner against the statutory liability arising out of accidents occurring during the currency of the policy due to handling of hazardous substances as provided for in the said Act and the Rules framed thereunder.

2. DEFINITIONS

For the purpose of this policy, the following terms shall have the meaning as set forth hereunder:

- (i) "Act" unless otherwise specifically mentioned shall mean the Public Liability Insurance Act 1991 as amended from time to time;
- (ii) "Accident" means an accident involving a fortuitous, sudden or unintentional occurrence while handling any hazardous substance resulting in continuous, intermittent or repeated exposure to death of, or injury to any person or damage to any property but does not include an accident by reason only of war or radioactivity;
- (iii) "Handling" in relation to any hazardous substance means the manufacture, processing, treatment, package, storage, transportation by vehicle, use, collection, destruction, conversion, offering for sale, transfer or the like of such hazardous substance;
- (iv) "Hazardous Substance" and group means any substance or preparation which is defined as hazardous substance under the Public Liability Insurance Act, 1991 and the Rules framed thereunder;
- (v) "Owner" or "Insured" means a person who owns, or has control over handling of any hazardous substance at the time of accident and includes:
 - (a) in the case of a firm, any of its partners
 - (b) in the case of an association, any of its members, and
 - (c) in the case of a company, any of its directors, managers, secretaries or other officers who is/are directly in charge of, and is/are responsible to the company for the conduct of the business of the company;
- (vi) "Turnover" shall mean
 - (a) In case of Manufacturing Units - Entire annual gross sales turnover including all levies and taxes of manufacturing units handling hazardous substance as defined in the Public Liability Insurance Act, 1991. For the purpose of this insurance, the term "Units" shall mean all operations being carried out in the manufacturing complex in one location.
 - (b) In case of Godowns/ Warehouse Owners - Total annual rental receipts of premises handling hazardous substance as defined in the Public Liability Insurance Act, 1991.
 - (c) In case of Transport Operators - Total annual freight receipts

(d) In all other cases – Total annual gross receipts

3. EXCLUSIONS

The Company shall not be liable:

- (i) for any wilful or intentional non-compliance of any statutory requirements;
- (ii) in respect of fines, penalties, punitive and /or exemplary damages;
- (iii) under any law or legislation except in so far as provided for in Section 8 (1) & 8 (2) of the Act;
- (iv) in respect of damage to property owned, leased or hired or under hire purchase or on loan to the Insured or otherwise in the Insured or Owner's control, care or custody;
- (v) for any liability directly or indirectly occasioned by, happening through or in consequence of war, invasion, act of foreign enemy, hostilities (whether war be declared or not) civil war, rebellion, revolution, insurrection or military or usurped power;
- (vi) for any liability directly or indirectly caused by or contributed to by:
 - (a) Ionising radiation or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel
 - (b) the radioactive, toxic, explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof;
- (vii) for matter outside the scope of Public Liability Insurance Act, 1991.
- (viii) in respect of losses/liability arising outside India.

4. CONDITIONS

- 1) The Insured Owner shall give written notice to the Company as soon as reasonable practicable of any claim made against the Insured Owner or of any specific event or circumstance that may give rise to a claim. The Insured Owner shall immediately give to the Company copies of notice of application forwarded by the Collector and all such additional information and/or assistance that the company may require.
- 2) No admission, offer, promise or payment shall be made or given by or on behalf of the Insured owner under this policy without the written consent of the Company.
- 3) The Company shall not be liable for any claim for relief made after five years from the date of occurrence of the accident.
- 4) The Insured Owner shall keep record of annual turnover, and at the time of renewal of insurance declare such turnover and all other details as may be required by the Company. The Company shall at all reasonable times have full rights to call for and examine such records.
- 5) If at the time of happening of any accident resulting in a claim under the policy there be any other insurance covering the same liability,

Liability Insurance

Public Liability

Form PL-02-0031

Insurance Contract

3133208123239400000

Page 6 of 21



then the Company shall not be liable to pay or contribute more than its rateable proportion of such liability.

- 6) The Company may cancel this policy by giving seven days' notice in writing of such cancellation to the Insured's last known address and in such an event the Company will return a pro-rata portion of the premium (subject to a minimum retention of 25 per cent of the annual premium) for the unexpired part of the insurance.

The policy may also be cancelled by the Insured by giving thirty days' notice in writing to the Company, in which event the Company will retain premium at short period scale as set forth in the table below, provided there is no claim under the policy during the Policy Period.

In case of any claim under the policy no refund of premium shall be allowed.

The Company shall have no obligation to give notice that the policy is due for renewal or renew this policy upon expiration or termination.

Table of Short Period Scales	
Period of Risk(Not exceeding)	Premium to be retained by the Company (% of the Annual Rate).
1 week	10%
1 month	25%
2 months	35%
3 months	50%
4 months	60%
6 months	75%
8 months	85%
Exceeding 8 months	Total Annual Premium

- 7) If the Company shall disclaim by the Insured Owner for any claim hereunder and such claim shall not within 12 calendar months from the date of such disclaimer have been made the subject matter of a suit in a competent Court of Law. Then the claim for all practical purpose shall be deemed to have been abandoned and shall not thereafter be recoverable hereunder or be made the subject matter of any suit.
- 8) The Company shall not be liable to make any payment in respect of any claim if such be in any manner fraudulent or support by any person on behalf of the insured Owner and/or if the insurance has been continued in consequence of any material misstatement or non-disclosure of any material information by or on behalf of the Insured Owner. In such a case if the Company pays any amount to the claimant due to any statutory provision such amount shall be recoverable from the Insured Owner.
- 9) The policy and the Schedule shall be read together as one contract and any word or expression to which a specific meaning has been assigned in the Act and the Rules framed there under or this policy shall bear such as specific meaning.
- 10) Any dispute regarding interpretation of the terms, conditions and exceptions of the Policy shall be determined in accordance with the law and practice of a court of competent jurisdiction within India.
- 11) Any person who has a grievance against the Company, may himself or through his legal heirs make a complaint in writing to the Insurance Ombudsman in accordance with the procedure contained in The Redressal of Public Grievance Rules, 1998 (Ombudsman Rules). Proviso to Rule 16(2) of the Ombudsman Rules however, limits compensation that may be awarded by the Ombudsman, to the lower of compensation necessary to cover the loss suffered by the insured as a direct consequence of the insured peril or Rs. 20 lakhs Rupees Twenty Lakhs Only) inclusive of ex-gratia and other expenses. A copy of the said Rules shall be made available by the Company upon prior written request by the Insured.

Public Liability Insurance (Under PLI Act 1991)

Endorsement

Policy Period	From: 01 January 2026 To: 31 December 2026
Effective Date	01 January 2026
Policy Number	3133208123239400000
Insured	Tata Steel Limited & New Merged Entities
Name of Company	HDFC ERGO General Insurance Company Limited
Date Issued	20 January 2026

Coinsurance Clause

1. It is hereby declared and agreed that insurers named hereunder severally agree and accept the following for the proportion set against its name:

1.1. In event of any claim being admissible by the insurer towards the liability, to pay or make good to the insured the value of the property at the time of the happening of its loss or destruction or the amount of such damage thereto as provided for under the policy and or

1.2. To indemnify the insured against liability at law or damage to any property or injuries to persons as provided for under the policy

1. Co-insurance Schedule:

SN	Name of the Insurer	Share (%)
1	(HDFC ERGO General Insurance Company Limited)	40
2	(ICICI Lombard General Insurance Company)	30
3	(SBI General Insurance Company)	30

1. Conditions forming part of this clause

It is hereby agreed and understood that:

3.1 The Insured in exercise of his option has after having understood the implications, selected the above named lead Insurer and the named Co-insurers vide sr. Nos. of the co-Insurance schedule as in point no. 2 under the policy.

3.2 The duties of insured would devolve upon the authorized intermediary licensed by IRDA (referred to as authorized representative thereafter) where the insured appoints such authorized intermediary to transact on his behalf with the insurer/s.

3.3 It shall be the responsibility of the insured or his authorized intermediary licensed by IRDA to decide on the panel of co-insurers and their respective shares of the risk herein as set out in co-insurance share under paragraph 2 above and communicate the same to all such participating co-insurers, prior to assumption of risk.

3.4 The lead Insurer shall finalize the terms and conditions applicable to the risk in the form of an underwriting slip with a unique code to be handed over to the Insured/Authorized intermediary.

3.5 It shall be the responsibility of the insured or his authorized representative to ensure that all insurers listed in the co-insurance schedule under paragraph 2 above, are fully aware of the terms and conditions of this policy and shall secure their unqualified acceptance of such terms and conditions prior to issuance of cover and inclusion of names of insurers in this co-insurance arrangement.

3.6 During the currency of the policy, if there are any material changes in risk or as changes in original terms and conditions such as variation in Sum Insured, changes in premium charged, extension of policy period, etc., the same shall be communicated by the insured or his authorized representative giving sufficient advance notice of 7 days to the leader as well as all other participating co-insurers listed in the co-insurance schedule under paragraph 2 above and procure confirmation thereon. The endorsement to this effect shall be executed by the lead insurer under advice to all other participating co-insurers.

3.7 The liability of the insurers shall in no case exceed in respect of each item of the sum expressed in the set schedule to be insured thereon or in the all, the total sum insured hereby or sums as may be substituted thereof by endorsement.

3.8 In the event of any of the insurers, chosen by the Insured as per paragraph 3.1 above and listed in the co-insurance schedule, withdrawing from participation in this Policy at any time during its currency after giving due notice of 14 days, the insured shall arrange for an alternative insurer to take up the full share of risk vacated by the existing insurer. In the event of insured failing to do so, the insured shall be considered as his own insurer for such share of risk or part there of which is not taken up by such alternative co-insurer.

3.9 In the event of a claim under this policy, the insured shall give notice of its occurrence to the Lead Insurer with a copy to all the insurers as listed in clause 2 above.

3.10 Upon receipt of such notification of claim, all claim related activities including appointment of surveyors, etc shall be done by the lead insurer who shall decide the admissibility as well as quantum of the claim and the co-insurers shall abide by the same.

3.11 In the event of any claim being value of more than 5 crores the lead insurer can immediately demand and the following co-insurer shall pay the cash call of their proportionate share of loss.

3.12 In all other cases, where the Lead Insurer pays 100% of the assessed loss, the following co-insurer/s shall remit their share of the loss to the Lead Insurers within a maximum period of 21 days from the date on which the Lead Insurer makes the demand.

Lead Insurer's declaration that the Claim and the amount there of was in accordance with terms and conditions of the Policy issued shall be considered sufficient by the co-insurers for the purpose of remitting their share of the loss to the Lead Insurer.

3.13 The co-insurers forming part of this agreement shall be entitled to demand and obtain from the Lead Insurer/ Intermediaries copies of all policies, endorsements or other claim related documents relevant to this co-insurance clause.

In witness, whereof, this policy has been signed by HDFC ERGO General Insurance Company (Lead Insurer) for itself and as authorized agents for other participating insurers named herein

Subject otherwise to the terms, exceptions, conditions and limitations of this policy.



All other terms and conditions remain unchanged.

A handwritten signature in black ink, appearing to read "A. Sharma", written over a horizontal line.

Authorized Representative

Public Liability Insurance (Under PLI Act 1991)

Endorsement

Policy Period	From: 01 January 2026 To: 31 December 2026
Effective Date	01 January 2026
Policy Number	3133208123239400000
Insured	Tata Steel Limited & New Merged Entities
Name of Company	HDFC ERGO General Insurance Company Limited
Date Issued	20 January 2026

PERFLUORINATED COMPOUNDS, PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES (PFAS) EXCLUSION

1. This policy does not cover any claim for actual or alleged loss, liability, damage, compensation, injury, sickness, disease, death, medical payment, defense cost, cost, expense or any other amount, directly or indirectly and regardless of any other cause contributing concurrently or in any sequence, originating from, caused by, arising out of, contributed to by, resulting from, or otherwise in connection with any PFAS.

2. For the purposes of this Exclusion, loss, liability, damage, compensation, injury, sickness, disease, death, medical payment, defense cost, cost, expense or any other amount, includes, but is not limited to, any cost to clean-up, detoxify, remove, monitor, contain, test for or in any way respond to or assess the effect of any PFAS.

PFAS means any chemical or substance that contains one or more alkyl carbons where fluorine partially or completely replaces the hydrogen atoms.

All other terms and conditions remain unchanged.



Authorized Representative

Public Liability Insurance (Under PLI Act 1991)**Endorsement**

Policy Period From: 01 January 2026 To: 31 December 2026
Effective Date 01 January 2026
Policy Number 3133208123239400000
Insured Tata Steel Limited & New Merged Entities
Name of Company HDFC ERGO General Insurance Company Limited
Date Issued 20 January 2026

ENDORSEMENT - SANCTIONS

No (re)insurer shall be deemed to provide cover and no (re)insurer shall be liable to pay any claim or provide any benefit hereunder to the extent that the provision of such cover, payment of such claim or provision of such benefit would expose that (re)insurer to any sanction, prohibition or restriction under United Nations resolutions or the trade or economic sanctions, laws or regulations of the European Union. This shall also apply to the trade or economic sanctions, laws or regulations enacted by the United Kingdom and the United States of America and India.

Subject otherwise to the terms, conditions and exclusions of this Policy.

All other terms and conditions remain unchanged.



Authorized Representative



Public Liability Insurance (Under PLI Act 1991)

Endorsement

Policy Period	From: 01 January 2026 To: 31 December 2026
Effective Date	01 January 2026
Policy Number	3133208123239400000
Insured	Tata Steel Limited & New Merged Entities
Name of Company	HDFC ERGO General Insurance Company Limited
Date Issued	20 January 2026

ARBITRATION CLAUSE (Arbitration wordings forming part of the policy wording, will be read and replaced as stated below: The parties to the contract may mutually agree and enter into a separate Arbitration Agreement to settle any and all disputes in relation to this policy. Arbitration shall be conducted under and in accordance with the provisions of the Arbitration and Conciliation Act, 1996.)

All other terms and conditions remain unchanged.

A handwritten signature in black ink, appearing to be "A. Sharma", written over a horizontal line.

Authorized Representative

GRIEVANCE REDRESSAL PROCEDURE

If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through:

- Call Centre : 022-62346234/ 0120-62346234
- Emails - care@hdfcergo.com
- Designated Grievance Officer in each branch.
- Company Website - www.hdfcergo.com
- Courier : Any of our Branch office or corporate office

You may also approach the Complaint & Grievance (C&G) Cell at any of our branches with the details of your grievance during our working hours from Monday to Friday.

If you are not satisfied with our redressal of your grievance through one of the above methods, you may contact our Head of Customer Service at

The Complaint & Grievance Cell ,
HDFC ERGO General Insurance Company Ltd.
Customer Happiness Center,
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Bhandup (West),MUMBAI - 400078.
State : Maharashtra, City : Mumbai
Pincode : 400078
Email: grievance@hdfcergo.com

In case you are not satisfied with the response / resolution given / offered by the C&G cell, then you can write to the Principal Grievance Officer of the Company at the following address

The Chief Grievance Officer
HDFC ERGO General Insurance Company Limited
Customer Happiness Center,
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Bhandup (West),Mumbai - 400078.
State : Maharashtra, City : Mumbai
Pincode : 400078
E Mail: cgo@hdfcergo.com

You may also approach the nearest Insurance Ombudsman for resolution of your grievance. The contact details of Ombudsman offices are mentioned below if your grievance pertains to:

- Insurance claim that has been rejected or dispute of a claim on legal construction of the policy
- Delay in settlement of claim
- Dispute with regard to premium
- Non-receipt of your insurance document

Names of Ombudsman and Addresses of Ombudsmen Centers	
Jurisdiction	Office Address
Gujarat, Dadra & Nagar Haveli, Daman and Diu	AHMEDABAD - Shri Kuldip Singh Office of the Insurance Ombudsman, Jeevan Prakash Building, 6th floor, Tilak Marg, Relief Road, Ahmedabad - 380 001. Tel.: 079 - 25501201/02/05/06 Email: bimalokpal.ahmedabad@ecoi.co.in (mailto:bimalokpal.ahmedabad@ecoi.co.in)
Karnataka	BENGALURU - Smt. Neerja Shah Office of the Insurance Ombudsman, Jeevan Soudha Building, PID No. 57-27-N-19 Ground Floor, 19/19, 24th Main Road, JP Nagar, 1st Phase, Bengaluru - 560 078. Tel.: 080 - 26652048 / 26652049 Email: bimalokpal.bengaluru@gbic.co.in (mailto:bimalokpal.bengaluru@ecoi.co.in)
Madhya Pradesh, Chattisgarh	BHOPAL - Shri Guru Saran Shrivastava Office of the Insurance Ombudsman, Janak Vihar Complex, 2nd Floor, 6, Malviya Nagar, Opp. Airtel Office, Near New Market, Bhopal - 462 003. Tel.: 0755 - 2769201 / 2769202 Fax: 0755 - 2769203 Email: bimalokpal.bhopal@ecoi.co.in (mailto:bimalokpal.bhopal@ecoi.co.in)
Orissa.	BHUBANESHWAR - Shri Suresh Chandra Panda Office of the Insurance Ombudsman, 62, Forest park, Bhubneshwar - 751 009. Tel.: 0674 - 2596461 / 2596455 Fax: 0674 - 2596429 Email: bimalokpal.bhubaneswar@ecoi.co.in (mailto:bimalokpal.bhubaneswar@ecoi.co.in)
Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Chandigarh	CHANDIGARH - Dr. Dinesh Kumar Verma Office of the Insurance Ombudsman, S.C.O. No. 101, 102 & 103, 2nd Floor, Batra Building, Sector 17 - D, Chandigarh - 160 017. Tel.: 0172 - 2706196 / 2706468 Fax: 0172 - 2708274 Email: bimalokpal.chandigarh@ecoi.co.in (mailto:bimalokpal.chandigarh@ecoi.co.in)
Tamil Nadu, Pondicherry Town and Karaikal (which are part of Pondicherry).	CHENNAI - Shri M. Vasantha Krishna Office of the Insurance Ombudsman, Fatima Akhtar Court, 4th Floor, 453, Anna Salai, Teynampet, CHENNAI - 600 018. Tel.: 044 - 24333668 / 24335284 Fax: 044 - 24333664 Email: bimalokpal.chennai@ecoi.co.in (mailto:bimalokpal.chennai@ecoi.co.in)
Delhi	DELHI - Shri Sudhir Krishna Office of the Insurance Ombudsman, 2/2 A, Universal Insurance Building, Asaf Ali Road, New Delhi - 110 002. Tel.: 011 - 23232481/23213504 Email: bimalokpal.delhi@ecoi.co.in (mailto:bimalokpal.delhi@ecoi.co.in)
Assam, Meghalaya, Manipur, Mizoram, Arunachal Pradesh, Nagaland and Tripura.	GUWAHATI - Shri Kiriti .B. Saha Office of the Insurance Ombudsman, Jeevan Nivesh, 5th Floor, Nr. Panbazar over bridge, S.S. Road, Guwahati - 781001 (ASSAM). Tel.: 0361 - 2632204 / 2602205 Email: bimalokpal.guwahati@ecoi.co.in (mailto:bimalokpal.guwahati@ecoi.co.in)

Andhra Pradesh, Telangana, Yanam and part of Territory of Pondicherry.	HYDERABAD - Shri I. Suresh Babu Office of the Insurance Ombudsman,6-2-46, 1st floor, "Moin Court",Lane Opp. Saleem Function Palace,A. C. Guards, Lakdi-Ka-Pool,Hyderabad - 500 004. Tel.: 040 - 67504123 / 23312122 Fax: 040 - 23376599 Email: bimalokpal.hyderabad@ecoi.co.in (mailto:bimalokpal.hyderabad@ecoi.co.in)
Rajasthan	JAIPUR - Smt. Sandhya Baliga Office of the Insurance Ombudsman,Jeevan Nidhi - II Bldg., Gr. Floor,Bhawani Singh Marg,Jaipur - 302 005. Tel.: 0141 - 2740363 Email: Bimalokpal.jaipur@ecoi.co.in (mailto:bimalokpal.jaipur@ecoi.co.in)
Kerala, Lakshadweep, Mahe-a part of Pondicherry.	ERNAKULAM - Ms. Poonam Bodra Office of the Insurance Ombudsman,2nd Floor, Pulinat Bldg.,Opp. Cochin Shipyard, M. G. Road,Ernakulam - 682 015. Tel.: 0484 - 2358759 / 2359338 Fax: 0484 - 2359336 Email: bimalokpal.ernakulam@ecoi.co.in (mailto:bimalokpal.ernakulam@ecoi.co.in)
West Bengal, Sikkim, Andaman & Nicobar Islands.	KOLKATA - Shri P. K. Rath Office of the Insurance Ombudsman,Hindustan Bldg. Annexe, 4th Floor,4, C.R. Avenue, KOLKATA - 700 072. Tel.: 033 - 22124339 / 22124340 Fax : 033 - 22124341 Email: bimalokpal.kolkata@ecoi.co.in (mailto:bimalokpal.kolkata@ecoi.co.in)
Districts of Uttar Pradesh : Laitpur, Jhansi, Mahoba, Hamirpur, Banda, Chitrakoot, Allahabad, Mirzapur, Sonbhadra, Fatehpur, Pratapgarh, Jaunpur,Varanasi, Gazipur, Jalaun, Kanpur, Lucknow, Unnao, Sitapur, Lakhimpur, Bahraich, Barabanki, Raebareli, Sravasti, Gonda, Faizabad, Amethi, Kaushambi, Balrampur, Basti, Ambedkarnagar, Sultanpur, Maharajgang, Santkabirnagar, Azamgarh, Kushinagar, Gorkhpur, Deoria, Mau, Ghazipur, Chandauli, Ballia, Sidharathnagar	LUCKNOW -Shri Justice Anil Kumar Srivastava Office of the Insurance Ombudsman,6th Floor, Jeevan Bhawan, Phase-II,Nawal Kishore Road, Hazratganj, Lucknow - 226 001. Tel.: 0522 - 2231330 / 2231331 Fax: 0522 - 2231310 Email: bimalokpal.lucknow@ecoi.co.in (mailto:bimalokpal.lucknow@ecoi.co.in)
Goa, Mumbai Metropolitan Region excluding Navi Mumbai & Thane.	MUMBAI - Shri Milind A. Kharat Office of the Insurance Ombudsman,3rd Floor, Jeevan Seva Annexe,S. V. Road, Santacruz (W),Mumbai - 400 054. Tel.: 022 - 26106552 / 26106960 Fax: 022 - 26106052 Email: bimalokpal.mumbai@ecoi.co.in (mailto:bimalokpal.mumbai@ecoi.co.in)
State of Uttaranchal and the following Districts of Uttar Pradesh: Agra, Aligarh, Bagpat, Bareilly, Bijnor, Budaun, Bulandshehar,Etah, Kanoj, Mainpuri, Mathura, Meerut, Moradabad, Muzaffarnagar, Oraiyya, Pilibhit, Etawah, Farrukhabad, Firozbad, Gautambodhanagar, Ghaziabad, Hardoi, Shahjahanpur, Hapur, Shamli, Rampur, Kashganj, Sambhal, Amroha, Hathras, Kanshiramnagar, Saharanpur.	NOIDA - Shri Chandra Shekhar Prasad Office of the Insurance Ombudsman,Bhagwan Sahai Palace 4th Floor, Main Road,Naya Bans, Sector 15, Distt: Gautam Buddh Nagar, U.P-201301. Tel.: 0120-2514250 / 2514252 / 2514253 Email: bimalokpal.noida@ecoi.co.in (mailto:bimalokpal.noida@ecoi.co.in)
Bihar, Jharkhand.	PATNA - Shri N. K. Singh Office of the Insurance Ombudsman,1st Floor,Kalpana Arcade Building,Bazar Samiti Road,Bahadurpur, Patna 800 006. Tel.: 0612-2680952 Email: bimalokpal.patna@ecoi.co.in (mailto:bimalokpal.patna@ecoi.co.in)



Maharashtra, Area of Navi Mumbai and Thane excluding Mumbai Metropolitan Region.	PUNE - Shri Vinay Sah Office of the Insurance Ombudsman, Jeevan Darshan Bldg., 3rd Floor, C.T.S. No.s. 195 to 198, N.C. Kelkar Road, Narayan Peth, Pune - 411 030. Tel.: 020-41312555 Email: bimalokpal.pune@ecoi.co.in (mailto:bimalokpal.pune@ecoi.co.in)
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CUSTOMER INFORMATION SHEET / KNOW YOUR POLICY

This document provides only key information about your policy 3133208123239400000 . Please refer to the policy document for detailed terms and conditions.

S.No	Title	Description (Please refer to applicable Policy Clause Number in next column)	Policy Clause Number	
1	Product Name	Public Liability Insurance Policy (Under PLI Act), 1991	NA	
2	Unique Identification Number (UIN) allotted by IRDAI	IRDAN125CP0002V01200809.	NA	
3	Structure	State basis of Sum / Limit Insured • Indemnity Basis	NA	
4	Interests Insured	People/owners associated with the production or handling of any hazardous chemicals who have availed for this policy.	NA	
5	Sum Insured	Details	Refer policy schedule	
		Each Accident Insurance Limit		2,500,000,000.00
		Aggregate Insurance Limit		5,000,000,000.00
6	Policy Coverage	to indemnify the Insured or Owner against the statutory liability arising out of accidents occurring during the currency of the policy due to handling of hazardous substances as provided for in the said Act and the Rules framed thereunder. This Policy provides coverages subject to terms, conditions and exclusions outlined in the policy document.	Operative Clause	
7	Add-on Cover	<<as per policy schedule>>	Refer policy schedule	
8	Loss Participation	Compulsory Excess: Not Applicable Voluntary Excess: Not Applicable	Refer policy schedule	
9	Exclusions	The Company shall not be liable: (i) for any willful or intentional non-compliance of any statutory requirements; (ii) in respect of fines, penalties, punitive and /or exemplary damages; (iii) under any law or legislation except in so far as provided for in Section 8 (1) & 8(2) of the Act; (iv) in respect of damage to property owned, leased or hired or under hire purchase or on loan to the Insured or otherwise in the Insured or Owner's control, care or custody;	Exclusions	



		<p>(v) for any liability directly or indirectly occasioned by, happening through or in consequence of war, invasion, act of foreign enemy, hostilities (whether war be declared or not) civil war, rebellion, revolution, insurrection or military or usurped power;</p> <p>(vi) for any liability directly or indirectly caused by or contributed to by:</p> <p>(a) Ionising radiation or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel.</p> <p>(b) the radioactive, toxic, explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof;</p> <p>4. arising out of loss of a pure financial nature, including but not limited to, loss of goodwill and/or loss of market.</p> <p>(vii) for matter outside the scope of Public Liability Insurance Act, 1991.</p> <p>(viii) in respect of losses/liability arising outside India.</p> <p>This Policy provides coverages subject to terms, conditions and exclusions outlined in the policy document.</p>													
10	Special Conditions and Warranties (if any)	<<as per policy schedule>>	Policy schedule												
11	Admissibility of Claim	<p>1.Intimation of a claim or any circumstances which may give rise to any claim should be reported immediately.</p> <p>2.No admission, offer, promise or payment of liability without Insurer consent.</p> <p>3.Provide all such information and assistance to company which is required.</p> <p>4.Company has right to defend the claim against Insured</p> <p>Claim shall be paid as per following calculation:-</p> <table border="1"> <thead> <tr> <th>Head</th> <th>Example</th> </tr> </thead> <tbody> <tr> <td>Legal liability as covered under the policy (a)</td> <td>100000</td> </tr> <tr> <td>Defense cost (b)</td> <td>20000</td> </tr> <tr> <td>total loss amount (c = a+b)</td> <td>120000</td> </tr> <tr> <td>Deductible (d)</td> <td>10000</td> </tr> <tr> <td>Net Payable amount (c-d)</td> <td>110000</td> </tr> </tbody> </table>	Head	Example	Legal liability as covered under the policy (a)	100000	Defense cost (b)	20000	total loss amount (c = a+b)	120000	Deductible (d)	10000	Net Payable amount (c-d)	110000	NA
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Legal liability as covered under the policy (a)	100000														
Defense cost (b)	20000														
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Deductible (d)	10000														
Net Payable amount (c-d)	110000														



12	Policy Servicing - Claim Intimation and Processing	<ul style="list-style-type: none"> • Toll free / IVRS number of the Insurer 120 6234 6234 / 022-6234 6234 • Website - www.hdfcergo.com Email- care@hdfcergo.com • Details of designated company officials to be contacted in time of claim • Liability Claims Manager – email ID - care@hdfcergo.com • Details of procedure to be followed for Turn Around Time (TAT) for claims settlement <ol style="list-style-type: none"> 1. Registration of claim – T +1 days 2. List of requirement – 7 days from registration 3. Claim settlement / Denial = T+30 days (T = date of receipt of last documents) • Escalation Matrix when TAT is not satisfied Email to – liabilityclaims@hdfcergo.com	
13.	Grievance Redressal and Policyholders Protection	<p>If You have a grievance about any matter relating to the Policy, or Our decision on any matter, or the claim, You can address Your grievance as follows:</p> <p>1. Our Grievance Redressal Officer</p> <p>If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through:</p> <ul style="list-style-type: none"> • Call Centre - 120 6234 6234 / 022-6234 6234 <p>If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through:</p> <ul style="list-style-type: none"> • Call Centre - 120 6234 6234 / 022-6234 6234 <p>If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through:</p> <ul style="list-style-type: none"> • Call Centre - 120 6234 6234 / 022-6234 6234 <p>If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through:</p> <p>If you are not satisfied with our redressal of your grievance through one of the above methods, you may contact our Head of Customer Service at</p> <p>The Complaint & Grievance Redressal Cell , HDFC ERGO General Insurance The Company Ltd. D-301,3rd Floor, Eastern Business District (Magnet Mall), LBS Marg, Bhandup (West), Mumbai – 400078, Maharashtra</p> <p>In case you are not satisfied with the response / resolution given / offered by the C&G cell, then you can write to the Chief Grievance Officer of the Company at the following address</p>	redressal of grievances

		<p>To the Chief Grievance Officer HDFC ERGO General Insurance The Company Limited D-301, 3rd Floor, Eastern Business District (Magnet Mall), LBS Marg, Bhandup (West), Mumbai - 400078, Maharashtra e-mail: cgo@hdfcergo.com</p> <p>Grievance may also be lodged at IRDAI Integrated Grievance Management System- https://bimabharosa.irdai.gov.in</p> <p>You may also approach the nearest Insurance Ombudsman for resolution, if your grievance is not redressed by the Company. The contact details of Ombudsman offices are below if your grievance pertains to:</p> <ul style="list-style-type: none"> • Insurance claim that has been rejected or dispute of a claim on legal construction of the policy • Delay in settlement of claim • Dispute with regard to premium • Non-receipt of your insurance document <p>You may also refer Our website www.hdfcergo.com https://www.hdfcergo.com/customer-care/grievances.html for detailed grievance redressal procedure</p>	
14	Obligations of the Policyholder	<ul style="list-style-type: none"> • To disclose all information correctly sought by the insurer at time of filling the proposal form • In case of any change / modification / addition to the already declared information the same shall be brought to the notice of the Insurer immediately • Non-disclosure of material information may affect the claim settlement. <p>Disclosure of other material information during the policy period.</p>	

Declaration by the Policyholder;

I have read the above and confirm having noted the details.

Place:

Date: (Signature of the Policyholder)

Note:

- i. Insurer shall provide web-link where the product related documents including the Customer Information sheet are available on the website of the Insurer.
- ii. In case of any conflict, the terms and conditions mentioned in the policy document shall prevail.
- iii. **Insurer to take confirmation of the Policyholder regarding receiving of the Customer Information Sheet.**