

ଦି ଓଡ଼ିଶା ମିନେରାଲ୍ସ ଡେଭେଲପମେଣ୍ଟ କମ୍ପାନୀ ଲିମିଟେଡ୍
(ଭାରତ ସରକାରଙ୍କ ସଂସ୍ଥା)

Ref: NSE, BSE & CSE/OMDC/CS/08-2026/01

Dated: 13.08.2026

To The Compliance Department National Stock Exchange of India Limited, Exchange Plaza, Plot No. C/1, Block – G BandraKurla Complex Bandra (E), Mumbai - 400051 SYMBOL: ORISSAMINE	To The Compliance Department Department of Corporate Services Bombay Stock Exchange Ltd 1 st Floor, PhiozeJee, Jeebhoy Towers, Bombay Samachar Marg, Mumbai – 400001 SYMBOL: 590086	To The Secretary The Calcutta Stock Exchange Limited 7, Lyons Range Kolkata-700001 SCRIP CODE: 25058
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SUBJECT: ENVIRONMENT CLEARANCE OF BELKUNDI IRON & MANGANESE ORE MINE WITH PRODUCTION CAPACITY 1.8 MTPA IRON ORE AND 0.3 MTPA MANGANESE ORE-REG.

Dear Sir,

With reference to File No.: 23-204/2018-IA.III(V), Ministry of Environment, Forest and Climate Change IA Division, Government of India, dtd. 12.08.2026 hereby grants Environment Clearance (EC) for the Belkundi Iron & Manganese Ore Mine over an area of 1276.79 Hect. (as per RoR) /1276.949 Hect. (as per DGPS) with restriction of mining in an area of 920.6 ha for production capacity of 1.8 MTPA Iron Ore and 0.3 MTPA Manganese Ore along with installation of crusher capacity of 100 TPH, 200 TPH and Screening plant of 400 TPH and 200 TPH, by M/s The Orissa Minerals Development Company Limited located at village Belkundi, Nalda, Karakolha, Karakhendra, Uliburu Unit-1, Barbil-7 & 8 and Uliburu R.F in Barbil Tahasil, Sub-Division- Champua, Dist-Keonjhar, Odisha - Environmental Clearance under violation category based on S.O 804 (E) dated 14/03/2017.

The above-mentioned proposal was considered and recommended by EAC in the 9th meeting held on 17/07/2026. The minutes of the meeting and all the project documents can be accessed from the PARIVESH portal.

The copy of the Environmental Clearance (EC) granted is enclosed.

This is for your kind information & record.

Thanking You.

Yours faithfully,
For The Orissa Minerals development Co. Ltd.

(Pintu Kumar Biswal)
Company Secretary



सत्यमेव जयते

File No.: 23-204/2018-IA.III(V)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 12/08/2026



To,

MRS MANORAMA MOHAPATRA
M/s. THE ORISSA MINERALS DEVELOPMENT COMPANY LIMITED
AG - 104, SOURAV ABASAN, 2ND FLOOR, SECTOR-II, SALT LAKE CITY Kolkata - 700091
bh.omdc@birdgroup.gov.in

Subject: Belkundi Iron & Manganese Ore Mine over an area of 1276.79 Hect. (as per RoR) /1276.949 Hect. (as per DGPS) with restriction of mining in an area of 920.6 ha for production capacity of 1.8 MTPA Iron Ore and 0.3 MTPA Manganese Ore along with installation of crusher capacity of 100 TPH, 200 TPH and Screening plant of 400 TPH and 200 TPH, by M/s The Orissa Minerals Development Company Limited located at village Belkundi, Nalda, Karakolha, Karakhendra, Uliburu Unit-1, Barbil-7 & 8 and Uliburu R.F in Barbil Tahasil, Sub-Division- Champua, Dist-Keonjhar, Odisha - Environmental Clearance under violation category based on S.O 804 (E) dated 14/03/2017 – regarding.

Sir/Madam,

This is in reference to your online application No. IA/OR/MIN/497426/2024 dated 20.09.2024 submitted to this Ministry for the grant of prior Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 and its subsequent amendments, for the project titled Belkundi Iron & Manganese Ore Mine over an area of 1276.79 Hect. (as per RoR) /1276.949 Hect. (as per DGPS) with restriction of mining in an area of 920.6 ha for production capacity of 1.8 MTPA Iron Ore and 0.3 MTPA Manganese Ore along with installation of crusher capacity of 100 TPH, 200 TPH and Screening plant of 400 TPH and 200 TPH, by M/s The Orissa Minerals Development Company Limited located at village Belkundi, Nalda, Karakolha, Karakhendra, Uliburu Unit-1, Barbil-7 & 8 and Uliburu R.F in Barbil Tahasil, Sub-Division- Champua, Dist-Keonjhar, Odisha.

2. The particulars of the proposal are as below :

(i) EC Identification No.

EC24A0000OR5416561N

(ii) File No.	23-204/2018-IA.III(V)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Sector	Non-Coal Mining
(vii) Name of Project	Belkundi Iron & Manganese Ore Mine
(viii) Location of Project (District, State)	KENDUJHAR, ODISHA
(ix) Issuing Authority	MoEF&CC
(x) Applicability of General Conditions	No

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Common Application Form and Part A, B and C were submitted to the MoEF&CC for an appraisal by the EAC under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered and recommended by EAC in the 9th meeting held on 17/07/2026. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.

5. Based on aforesaid discussions and presentation made by the Project Proponent and the Consultant, the Expert Appraisal Committee (EAC), in its 9th EAC meeting held on 17th July, 2026, under the provisions of the EIA Notification, 2006 and its subsequent amendments, recommended the proposal for grant of Environment Clearance (EC) to Belkundi Iron & Manganese Ore Mine over an area of 1276.79 Hect. (as per RoR) /1276.949 Hect. (as per DGPS) with restriction of mining in an area of 920.6 ha production capacity 1.8 MTPA Iron Ore and 0.3 MTPA Manganese Ore along with installation of crusher of 100 TPH, 200 TPH capacity and Screening plant of 400 TPH and 200 TPH capacity, by M/s The Orissa Minerals Development Company Limited located at village Belkundi, Nalda, Karakolha, Karakhendra, Uliburu Unit-1, Barbil-7 & 8 and Uliburu R.F in Barbil Tahasil, Sub-Division- Champua, Dist-Keonjhar, Odisha under violation notification S.O. 804(E) dated 14.03.2017 subject certain specific conditions in addition to the existing standard condition applicable for Non-coal mining projects (Annexure - 1).

6. The details of the project as per the information submitted by the Project Proponent are enclosed as Annexure 2.

7. The Ministry has examined the proposal in accordance with the provisions of the Environmental Impact Assessment (EIA) Notification, 2006, and its subsequent amendments, and based on the recommendations of the Expert Appraisal Committee (EAC), the Ministry hereby accords Environmental Clearance (EC) to Belkundi Iron & Manganese Ore Mine over an area of 1276.79 Hect. (as per RoR) /1276.949 Hect. (as per DGPS) with restriction of mining in an area of 920.6 ha production capacity 1.8 MTPA Iron Ore and 0.3 MTPA Manganese Ore along with installation of crusher of 100 TPH, 200 TPH capacity and Screening plant of 400 TPH and 200 TPH capacity, by M/s The Orissa Minerals Development Company Limited located at village Belkundi, Nalda, Karakolha, Karakhendra, Uliburu Unit-1, Barbil-7 & 8 and Uliburu R.F in Barbil Tahasil, Sub-Division- Champua, Dist-Keonjhar, Odisha under violation notification S.O. 804(E) dated 14.03.2017. The clearance is subject to strict compliance with the specific conditions prescribed for this project, in addition to the standard conditions applicable to non-coal mining projects as detailed in Annexure I.

8. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006, as amended. It does not tantamount to approvals/consent/permissions etc. required to be obtained

under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

9. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

10. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

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

12. General Instructions:

- a. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC website where it is displayed.
- b. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.
- c. The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.
- d. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
- e. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- f. The Regional Office of this MoEF&CC shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- g. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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

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

Copy To

1. The The Controller General, Indian Bureau of Mines, Indian Bureau Of Mines Indira Bhavan Civil Lines Nagpur-440001, Nagpur, Maharashtra, ccom@ibm.gov.in
2. The Director General, Directorate General of Mines Safety, Directorate General Of Mines Safety Hirapur Dhanbad Jharkhand 826001, Dhanbad, Jharkhand, dg@dgms.gov.in
3. The Member Secretary, CGWA, 18/11 Jamnagar House Man Singh Road, Central, Delhi, cgwa@nic.in
4. The Member Secretary, CPCB, Parivesh Bhawan Cbd-Cum-Office Complex East Arjun Nagar, East, Delhi, mscb.cpcb@nic.in
5. The Monitoring Cell MoEFCC, Compliance & Monitoring Division, Indira Paryavaran Bhawan Jor Bagh Road New Delhi, South, Delhi, moefcc-monitoring@gov.in
6. The Deputy Director General, Regional Office, "Deputy Director General Of Forests (C) Ministry Of Environment Forest And Climate Change Regional Office A/3 Chandshekharapur Bhubaneswar-751023", N/A, N/A, roez.bsr-mef@nic.in
7. The Secretary, Ministry of Mines, Ministry Of Mines Shastri Bhawan, New Delhi, Delhi, secy-mines@nic.in
8. The Member Secretary, SPCB/PCC, Paribesh Bhawan A-118 Nilakantha Nagar Unit-Viii, Bhubaneswar, Odisha, membersecretary@ospcbboard.org
9. The PCCF & CWLW, Odisha Forest Department Government of Odisha., Prakruti Bhavan 5th Floor Govt.Bda Apartments Nilakantha Nagar Naya Palli Bhubaneshwar-751012, Khordha, Odisha, pccfwl@odisha.gov.in
10. The District Collector, DC Office, Collectorate Keonjhar Odisha, Kendujhar, Odisha, dm-keonjhar@nic.in

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. 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”

S. No	EC Conditions
1.1	Department of Steel & 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.
1.2	The expansion or opening of new manganese ore mines may be considered only when the actual production of about 80% is achieved. Further, the mines that have not produced Mn ore for last two years and have no commitment in the current year as well; EC capacity in such cases may be reviewed. The Department of Steel & Mines, Govt. of Odisha shall submit the Annual Report on this issue to the MoEF&CC for further necessary action.

S. No	EC Conditions									
1.3	Analysis of baseline environmental quality data for the year 2014 and 2016 indicates that existing mining activities appear to have little / no potential impact on environmental quality, except on air environment, which was mainly due to re-suspension of road dust. Therefore, all the working mines can continue to operate with strict compliance to monitoring of environmental quality parameters as per EC and CTE/CTO conditions of the respective mine, 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&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.									
1.4	Considering the existing environmental quality, EC capacity, production rate, iron ore resources availability and transport infrastructure availability, the share of Joda and Koira sector works out to be 70% and 30% respectively for the existing scenario for the year 2015-16. However, for additional EC capacity, it can be 50:50 subject to commensurate infrastructure improvement (viz. SOTM, pollution free road transport, enhancement of rail network etc.) in the respective regions.									
1.5	Continuous monitoring of different environmental quality parameters as per EC and CTE/CTO conditions with respect to air, noise, water (surface & ground water) and soil quality in each region shall be done. The environmental quality parameters should not indicate any adverse impact on the environment. Monitoring within the mines should be done by individual mine lease holders, whereas outside the mine lease area, monitoring should be done by the Govt. of Odisha through various concerned departments/ authorized agencies. Various monitoring/ studies should be conducted through national reputed institutes, NABET/ MoEF&CC accredited laboratories/organizations. The reports submitted by individual mine lease holders and study reports prepared by other concerned departments/agency for each of the regions should be evaluated and examined by SPCB/ MoEF&CC.									
1.6	Construction of 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 minimum 300 m inside the mine should be done. This should be done within one year for existing mines and new mine should have since beginning. The concerned departments should extend full support; wherever the land does not belong to the respective mine lease holders. The Department of Steel & 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 above.									
1.7	In view of high dust pollution and noise generation due to road transport, it is proposed to regulate/guide the movement of iron and manganese ore material based on the EC capacity of the mines. Accordingly, ore transport mode has been suggested, as given below in Table. Table : EC Capacity based Suggested Ore Transport Mode (SOTM) <table><tr><th>Code</th><th>EC Capacity</th><th>Suggested Ore Transport Mode</th></tr><tr><td>SOTM 1</td><td>≥ 5 MTPA</td><td>100% by private railway siding or conveyor belt up to public railway siding or pipeline for captive mines and 70% for non-captive mines</td></tr><tr><td>SOTM 2</td><td>Between 3 and <5 MTPA</td><td>Minimum 70% by public railway siding, through conveyor belt and maximum 30% by road - direct to destination or other public railway siding or above option</td></tr></table>	Code	EC Capacity	Suggested Ore Transport Mode	SOTM 1	≥ 5 MTPA	100% by private railway siding or conveyor belt up to public railway siding or pipeline for captive mines and 70% for non-captive mines	SOTM 2	Between 3 and <5 MTPA	Minimum 70% by public railway siding, through conveyor belt and maximum 30% by road - direct to destination or other public railway siding or above option
Code	EC Capacity	Suggested Ore Transport Mode								
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SOTM 2	Between 3 and <5 MTPA	Minimum 70% by public railway siding, through conveyor belt and maximum 30% by road - direct to destination or other public railway siding or above option								

S. No	EC Conditions		
	SOTM 3 Between 1 and < 3 MTPA SOTM 4 <1 MTPA	Minimum 70% by public railway siding and maximum 30% by road - direct to destination or by other public railway siding or above options 100 % by 10/17 Ton Trucks or above options	It is mentioned by State Govt. of Odisha that currently about 45% of the iron ore is despatched using rail network and progressively it will be increased to about 60% by rail/slurry over a period of 5 years, taking into account time required to set up more railway sidings. In view of present ore transport practices and practical limitations, all the 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. However, 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. Transportation of iron & manganese ore through river (jetty) to nearest Sea port (Sea cargo option) may be explored or connecting Sea ports with Railway network from the mines to be improved further so that burden on existing road and rail network and also pollution thereof can be minimized. 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 MoEF&CC. Responsibility: Department of Steel & Mines, Govt. of Odisha; Time Period: 5 Years for developing railway/ conveyor belt facilities
1.8	Development of parking plazas for trucks with proper basic amenities/ facilities should be done inside mine. This should be done within one year for existing mines and new mines should have since beginning. Small capacity mines (in terms of lease area or production) not having enough space within the mine lease areas should develop parking plaza at a common place within the region with requisite facilities. Responsibility: Individual Mine Lease Holders; Time Period: 1 Year		
1.9	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. Responsibility: Department of Steel & Mines with PWD / NHAI Time Period: 2 Years.		
1.10	Regular vacuum cleaning of all mineral carrying roads aiming at “Zero Dust Re- suspension” may be considered. Responsibility: PWD / NHAI/ Mine Lease Holders; Time Period: 3 months for existing roads.		
1.11	Expansion of existing mines and new mines should be considered after conducting recent EIA Study (as per the provisions of EIA Notification 2006, as amended time to time) with proper justification on demand scenario for iron ore requirement and availability of pollution free transport network in the region. Responsibility: IBM, Department of Steel & Mines and MoEF&CC, New Delhi.		

S. No	EC Conditions																																																	
1.12	Mine-wise Allocation of Annual Production: 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 & Mines. Department of Steel and Mines in consultation with Indian Bureau of Mines-RO should prepare in advance mine-wise annual production scenario as suggested in Table, so that demand for iron ore can be anticipated, and actual production/dispatch does not exceed the suggested annual production. Table: Allocation of Production to Different Mines for 5 Years (as per approved Mining Plan) <table><tr><th>Mine Lease</th><th>EC Capacity (MTPA)</th><th colspan="5">Suggested Annual Production (MT)</th></tr><tr><th></th><th></th><th>2016-17 Yr 1</th><th>2017-18 Yr 2</th><th>2018-19 Yr 3</th><th>2019-20 Yr 4</th><th>2020-21 Yr 5</th></tr><tr><td>Mine 1</td><td>X1</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Mine 2</td><td>X2</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Mine 3</td><td>X3</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Mine n</td><td>Xn</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Total</td><td>160 + dX</td><td>105</td><td>129</td><td>153</td><td>177</td><td>201</td></tr></table> Next year allocation = Average of EC Capacity and Last year production	Mine Lease	EC Capacity (MTPA)	Suggested Annual Production (MT)							2016-17 Yr 1	2017-18 Yr 2	2018-19 Yr 3	2019-20 Yr 4	2020-21 Yr 5	Mine 1	X1						Mine 2	X2						Mine 3	X3						Mine n	Xn						Total	160 + dX	105	129	153	177	201
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1.13	Expansion of Existing Mines having Validity up to 2020: In view of implementation of MMDR Act 2015, wherein many non-captive mines are expected to be closed by March 2020, total iron ore production scenario has been. It is expected that the non-captive mines having validity till 2020 shall try to maximize their production (limited to EC capacity) in the remaining period. Further, depending upon availability of iron ore resources, these mines may also seek expansion of EC capacity. It may be noted here that total EC capacity of existing 25 working mines having validity upto 2020 is about 85 MTPA, whereas actual production from these mines has been only 44.677 MT (52.6%) during 2015-16 and 57.07 MT (67.1%) during 2016-17. Also, it is expected that these mines would not even be able to achieve ore production as per existing EC capacity till March 2020. Therefore, these existing mines should go for production to the fullest extent to meet the requisite demand from the State. However, where EC limit is exhausted, application for expansion may be considered. Further, the EC process (i.e. Grant of TOR, Baseline data collection, Mining plan/scheme approval, Public hearing, preparation of EIA/EMP Report. Appraisal by the EAC and grant of EC) takes about one year time. Under such circumstances, it is suggested that further applications for grant of TOR or grant of EC for expansion of production capacity of the mine should be considered for those existing mines, which have exhausted their capacity subject to consideration of all environmental aspects. Responsibility: Department of Steel & Mines and MoEF&CC, New Delhi.																																																	
1.14	Sustained Iron Ore Production beyond 2020: Considering the implementation of MMDR Act 2015, total production of iron ore in Odisha State is anticipated to be about 111 MT during 2016-17 (actual production was – 102.663 MT), 136 MT during 2017-18, 146 MT during 2018-19 and 146 MT during 2019-20. Then there will be substantial drop in total production (to the tune of 73 MT during 2020-21 onwards) due to closure of mines, which are valid up to 2020. Therefore, in order to maintain operation/sustained growth of downstream industries, iron ore mining in the region needs to be continued at a sustainable rate. The State Govt. through Department of Steel and Mines should initiate appropriate action to ensure continued availability of iron ore from the region, as per suggested sustainable annual production.																																																	

S. No	EC Conditions
1.15	Reserves Estimation–Mining Plan and Exploration: Appropriate actions (geo-technical investigation for qualitative and quantitative resource estimation & other preparations for auction of mines), may be initiated taken into account the existing working mines, and the mines which were operational at some point of time (but closed presently due to various reasons). The total iron ore reserves/ resources available within the total lease area of each mine should be estimated by State Govt./NMET/ GSI (or any other approved agency) with respect to: (i) Total lease area of mine (surface), (ii) Maximum depth to which resources could be available, (iii) Resources below the ground water table (if intersected), (iv) Reserves are to be estimated as per UNFC code with respect to quantity and quality (% Fe content), (v) Maximum mining rate and area for auction (after 2020) will be calculated based on total resources available and proposed life of mine leading to closure of mine in a stipulated time period. Responsibility: Department of Steel & Mines, IBM and GSI; Time frame: 1 year for the mines to be auctioned for next 2 years. The above mentioned organizations shall ensure the compliance with respect to timelines for implementations.
1.16	Depending upon availability of extractable iron ore resources within a mine, mining below the ground water table may be permitted after conducting necessary geological and hydro-geological study by GSI and requisite approval from the CGWB/CGWA (Central Ground Water Board/Authority). This can be explored at least in few mines on trial/pilot basis. Further, within a mine, it will be desirable to operate one pit at a time, and next pit should be opened after extracting maximum possible resources from the first pit, so that the exhausted pit can be used for back filling/ storing of low grade iron ore. However, depending upon the quantity and/or quality of iron/ manganese ore, other mine pits in the same mine lease may also be opened for sustainable scientific mining, as per approved mining plan/scheme of mining by IBM. The Department of Steel & Mines, Govt. of Odisha should initiate the pilot project so that minerals are fully utilized.
1.17	Commercial Utilization of Low Grade Ore: R&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&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 should also be explored. Responsibility: IBM, Dept. of Steel & Mines, Individual Mine Lease Holders
1.18	he 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 & 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 & Mines, Govt. of Odisha and Concerned Mines along with Indian Railways. Time Period: Maximum 7 years (by 2025). The Department of Steel & Mines, Govt. of Odisha should follow-up with the concerned Departments

S. No	EC Conditions
	and railways so that proposed proper rail network is in place by 2025.
1.19	State Govt. of Odisha shall make all efforts to ensure exhausting all the iron & 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 & Mines, Govt. of Odisha.
1.20	Large and medium mine leases contribute to better implementation of reclamation and rehabilitation plans to sustain the ecology for scientific and sustainable mining. The small leases do not possess scientific capability of environmentally sustainable mining. Therefore, new mine leases having more than 50 ha area should be encouraged, as far as possible. This will ensure inter-generational resource availability to some extent. Responsibility: Dept. of Steel & Mines, Govt. of Odisha.
1.21	Mining Operations/Process Related: (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/ 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. (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. (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.
1.22	Air Environment Related: (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. (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, PM2.5, SO2, NOx 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 locations may be more for larger capacity mines and working in larger area. Out of four stations, one should be online

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	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, PM2.5, SO2, NOx 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. Further, 11 continuous air quality monitoring systems may be installed in Joida and Koira regions and one in Baripada/ Rairangpur region. (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 using 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.
1.23	Noise and Vibration Related: (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 (detailed in Section 5.4) 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 atleast once in month, and mapped for any significant changes due to successive mining operations. Responsibility: Individual Mine Lease Holders.
1.24	Water/Wastewater Related: (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 runoff 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 on regular basis. The study can be conducted through NABL/ NABET approved water

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	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.
1.25	Land/ Soil/ Overburden Related: (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 developed in the non-mineralised 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.

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1.26	Ecology/Biodiversity (Flora-Fauna) Related: (i) As per the Red List of IUCN (International Union for Conservation of Nature), six floral species and 21 faunal species have been reported to be under threatened, vulnerable & endangered category. Protection of these floral and faunal species should be taken by the State Forest & Wildlife Department on priority, particularly in the mining zones, if any. (ii) The mines falling within 5-10 km of the Karo-Karampada Elephant corridor buffer need to take precautionary measures during mining activities. The forest and existing elephant corridor routes are to be protected and conserved. Improvement of habitat by providing food, water and space for the elephants is required to be ensured to avoid Man-Elephant conflicts. Though as per the records of State Forest Department, movement of elephants in the Karo-Karampada elephant corridor within 10 km distance from the mines in Joda and Koira is not observed, the Forest Department shall further record and ensure that elephant's movement is not affected due to mining activities. (iii) All precautionary 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. (iv) 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. (v) 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. (vi) 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. (vii) Vetiver plantation on inactive dumps may be encouraged as the grass species has high strength of anchoring besides medicinal value. (viii) 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. (ix) Similarly, Wildlife Department is also required to record and document annual status of wildlife in the region and should identify the need for wildlife management on regional level. (x) Maintenance of the ecology of the region is prime responsibility of the State Forest and Wildlife Department. They need to periodically review the status and identify the need for further improvement in the region. The required expenditure may be met from the funds already collected in the form of compensatory afforestation and wildlife management. Further, additional fund, if required can be sought from DMF. Responsibility: Individual Mine Lease Holders and State Forest & Wildlife Department.
1.27	Socio-Economic Related: (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 outtees and land losers/affected people, if any, should be

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	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 / Hon'ble Prime Minister's Vision centring 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.
1.28	Road Transport Related: (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, as suggested in Chapter 10. 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 & exit gate on regular basis, and be maintained within the acceptable limits. Responsibility: Individual Mine Lease Holders and Dept. of Steel & Mines.
1.29	Occupational Health Related: (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 centre should be established near mine site itself. Responsibility: Individual Mine Lease Holders and District Administration (District Medical Officer).
1.30	Reporting of Environmental Sustainability Achievement: All the mines should prepare annual environmental sustainability report (ESR), highlighting the efforts made towards environmental protection with respect to different environmental components vis-à-vis production performance of the mine on monthly basis. The data collected as per EC and CTE/CTO conditions should be utilized to prepare the annual sustainability report. The mines performing high with effective environmental safeguards may be suitably recognized/ rewarded. "Star Rating Format" formulated by the Ministry of Mines along with environmental sustainability report may be used.
1.31	Environmental Monitoring Requirements at Regional Level: Apart from strict compliance and

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	monitoring by individual mine lease holder, there is a need for simultaneous monitoring in each of the regions by competent expert agencies under the guidance/ supervision of concerned regulatory agency. Details of the studies required to be done on regular basis (continuously for 5 years) through responsible agency (organization of national/state repute) and time frame are suggested in Table. Table: Suggested Environmental Monitoring Requirements and Action Plans at Regional Level. <table> <tr> <th>Sr. No.</th><th>Study Component/ Action Plan</th><th>Responsibility</th><th>Monitoring and Reporting Time Frame (Approx.)</th></tr> <tr> <td>1.</td><td> Environmental Quality Monitoring with respect to Air, Water, Noise and Soil Quality in each region (Joda, Koira and Baripada/Rairangpur) as per specified frequency shall be done by a third party (preferably Govt.) and/or laboratory approved/ recognized by NABET/ CPCB/ SPCB/ MoEF&CC. All the water bodies (rivers, nallas, ponds etc.) shall be monitored. National/State level research/ academic institutes may be involved initially for couple of years to streamline the activity. The report shall be brought out annually by June each year. The study shall be conducted in consultation with MoEF&CC-RO. Installation of online ambient air quality monitor for PM10, PM2.5, SOx and NOx within the mine having more than 3 MTPA EC Capacity </td><td>SPCB</td><td>Continuous Annually</td></tr> <tr> <td>2.</td><td> Installation of online ambient air quality monitor for PM10, PM2.5, SOx and NOx in the Joda and Koira Region (total 11 locations). Status of flora and fauna in each of the regions shall be assessed on annual basis. Changes, if any, taking place in the region shall be brought out clearly. The study shall be conducted in consultation with State Forest and Wildlife Department. 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	Regional Director, Central Ground Water Board. Accordingly, all project proponents shall implement suitable conservation measures to augment ground water resources in the area. The State Govt. shall ensure construction and maintenance of dust free common roads/ appropriate rail network for transport of ore from mines to the consumer end. 5. Dept. of Steel & Mines 12 months for road network and 5-7 years for rail network 6. Construction and maintenance of dust free roads from respective mine to the main road Traffic/road inspection study addressing the condition of traffic/roads leading to different mines and connecting to different railway sidings shall be undertaken on annual basis. Respective Mine Lease Holders Continuous 6 months 7. Further, detailed traffic study shall be undertaken on every 5 yearly basis to ensure adequacy of road/rail infrastructure in each of the regions. The study can be undertaken through national/ state level research/ academic institute (such as CSIR-CRRI, New Delhi). Dept. of Steel & Mines Continuous 6 months 8. Assessment of land use/ land cover changes in each of the regions, with particular focus on mining areas, afforestation activities, variation in flow path of various water bodies etc. using remote sensing data ORSAC Annually 9. R&D Studies for utilization of low-grade iron ore Dept. of Steel & Mines through R&D / Academic Institutes Upto 45% by 2020 and upto 40% by 2025 The data so generated for the region should be made available on the website of Department of Steel & Mines and also at MoEF&CC website, so that it can be effectively utilized by Individual Mine Lease Holders for preparing EIA/ EMP reports. This will meet the requirement for separate one season baseline environmental quality data collection by the individual proponents, if the mine proposed is in the same study region. Further, MoEF&CC (through EAC) can also utilize the data base available in evaluating the proposals for expansion of existing mines or new mines while granting ToR or EC to the mine, taking an holistic view of the region. State Govt. of Odisha should bring out an integrated environmental sustainability report for each of the regions (mainly for Joda and Koia region) incorporating ESR of individual mines and data collected in the region through various agencies, once in 5 years, to plan level of scientific and sustainable mining for the next 5 years.
1.32	Institutional Mechanism for Implementation of Environmentally Sustainable Mining: The present study is not a one-time study, but a process to ensure environmentally sustainable mining activities in the region on long term basis. Looking into the large-scale mining activities and long term perspective for mining vis-à-vis environmentally sustainable mining and upliftment of people of the region, there is a need to create an agency, who will integrate all the aspects relating to sustainable mining in the region on long term basis. It could be a SPV of Govt. of Odisha or a cell within the

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	overall control and supervision of Dept. of Steel & Mines, with members from IBM, GSI, OSPCB, MoEF&CC-RO and other concerned Departments and Mine Owners (EZMA), District Administration. It is found that the strong database available for the region needs to be taken into account to map and establish environmental quality of the region on daily, monthly, seasonal and annual basis. Further, the efforts and initiatives of the mines towards environmental protection as well as upliftment of the people of the region are required to be integrated, and a systematic plan at the block/regional level needs to be framed for the overall benefit of the local society, region, district, state and the country as a whole. It will be desirable to have proper environmental quality data management and analysis by NEERI or any other agency for next 5 years (six monthly compliance reports followed by field verification) ensuring sustainable mining practices in the region leading to an overall development of the region. District Mineral Funds should be utilized appropriately for various developmental activities/needs of the region. Further, an environmental sustainability report incorporating environmental status of region coupled with social upliftment may be brought out by SPCB or any other authorized agency on annual basis. This report can be used for supporting the regional EIA study, and also need for environmental quality monitoring by individual mine seeking environmental clearance for new mine/ expansion of mine, including public hearing. Since, outcome of the above study reports shall be in the overall interest of all the stakeholders (including local population) of the region, further planning for the region shall warrant cooperation and assistance of all the stakeholders (mine operators, industries, transporters, State & Central Government Offices, MoEF&CC, CPCB, SPCB, Dept. of Steel & Mines, IBM, IMD, NGOs and local people) in sharing the relevant data/information/ reports/documents etc. to continuously improve upon the environmentally sustainable development plan for economic growth in mining sector as well as for improvement in quality of life of the people of the region.

2. Specific Conditions

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2.1	No blasting shall be allowed within 500 m distance from railway siding without prior permission from DGMS. Project Proponent shall not undertake any diversion of the existing railway line passing through the mine lease area (Deepak, Rashmi, and Jay Balaji private Railway Sidings). The prescribed safety barrier from the railway land shall be maintained at all times in accordance with the approved Mining Plan and the guidelines of the Indian Railways. Wherever mining operations are proposed in close proximity to the railway line, prior permission/No Objection Certificate (NOC) shall be obtained from the competent authority of the Indian Railways before commencement of such mining operations. The Project Proponent shall comply with all safety stipulations and conditions prescribed by the Indian Railways, including those relating to stability, vibration, blasting, and protection of railway infrastructure.
2.2	Proponent is requested to obtain prior permission for 120 KLD surface water withdrawal from the concerned competent authority before commencement of mining operations.
2.3	Existing nalla would remain undisturbed throughout the mining operations and that a 50 m safety barrier would be maintained on either side of the nalla as well as around the water bodies. The blast vibration monitoring would be carried out for every blast and that any controlled blasting within 500 m of the stream, if required, would be undertaken only after obtaining prior permission from the concerned competent authority.

S. No	EC Conditions																																																																																																																																	
2.4	Project proponent is required to submit a bank guarantee of an amount of Rs. 4,81,41,000/- towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.																																																																																																																																	
2.5	Project proponent shall implement the Damage Remediation Plan and Community Resource Augmentation Plan with a total budgetary provision of Rs. 4.81 crores, within first 3 years of grant of EC, as follows:																																																																																																																																	
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No.	Particulars	Remediation Budget (INR)			Total budget (INR)	1st year	2nd year	3rd year		Land Environment	14,05,334	14,05,334	14,05,334	42,16,000		Plantation Location: Village Panchayat, Primary Health Centers, Hospitals, Schools and Other available open spaces.						Plant Species: Karanja (Pongamia Glabra), Simaria (Bursera simaruba), Neem (Azadirachta), Sumarua (Samanea saman), Chhatian (Alstoniascholaris), Mango (Mangifera indica), Kadamba (Neolama Corekiacadamba) etc.					1.	Approx. 1800 Plants Per Year						Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.						Location: Water sprinkling at approach Road from Mine to 500 m distance towards villages/ habitation with frequency of daily basis.						Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.						Air Environment (Monitoring)	5,00,000	5,00,000	5,00,000	15,00,000	2.	Air Monitoring: Proposed at 8 locations on a quarterly basis frequency.						Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8, Barajamda, Murgabehra.						Water Environment	4,00,000	3,00,000	3,00,000	10,00,000		Rainwater Harvesting: RWH and Construction of septic tank & soak pits.					3.	Total No. of RWH = 2 Buildings Per Year						Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8, Barajamda, Murgabehra.						Noise Environment	2,50,000	2,50,000	2,50,000	7,50,000		Noise Monitoring: Noise Monitoring proposed at 6 locations near ML Boundary on a quarterly basis and Earbuds/ earplugs for workers safety.					4.	Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7.						Vibration Monitoring: At Six locations around Mine Lease within 500 m locations of Lease periphery.						Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.					5.	Biological Environment	7,50,000	7,50,000	7,50,000	22,50,000
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S. No	EC Conditions
	Flora - Plantation (as per schedule) and green belt development in inside premises. Plantation Location: Village Panchayat, Primary Health Centers, Hospitals, Schools and Other available open spaces. Plant Species: Karanja (Pongamia Glabra), Simaria (Bursera simaruba), Neem (Azadirachta), Sumarua (Samanea saman), Chhatian (Alstoniascholaris), Mango (Mangifera indica), Kadamba (Neolama Corekiacadamba) etc. Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8. Fauna - Conservation of schedule-I species in the study area.) As per approved site-specific wildlife conservation plan vide no. 4074/CWLW-FDWC-FD-0108-2024 dated 04th April 2025.
6.	Socio-Economic Environment 2,50,000 2,50,000 2,50,000 7,50,000 (Solar lights = Total 10 nos. per year @ Rs. 25,000/- with pole) Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu.
	Total 1,04,66,000/- Note: Recurring cost considered @10% of the total cost. Hence, it is Rs. 10,46,600/-.
	B. Break up of Natural Resource Augmentation Plan
S. No.	Activity Year – Wise Budget (INR) 1st year 2nd year 3rd year Total Budget (INR)
	Avenue Plantation (2500 m) 500 plants with tree guards on each side of the road (1000 plants x Rs. 750 each) and its maintenance till self-sustenance (1000 x 100) Locations: Nalda, Karakhendra, Belkundi, Karakolha
	7,50,000 7,50,000 7,50,000 22,50,000 1,00,000 1,00,000 1,00,000 3,00,000
	Sub-total 8,50,000 8,50,000 8,50,000 25,50,000
	Installation of Rainwater harvesting at 15 buildings per year in nearby Govt. Schools/ Hospitals/ Panchayats/ Community Centers/ Other premises in study area/ Keonjhar district. (45 nos.) (unit price approx. 2,00,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.
	30,00,000 30,00,000 30,00,000 90,00,000
	Recharge Ponds for groundwater recharge in 15 structures every year with minimum dimensions of 5x4x3 m = 60 Cu.m each (45 nos.) (unit price approx. 1,40,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi,
	21,00,000 21,00,000 21,00,000 63,00,000

S. No	EC Conditions			
	Karakolha, Uliburu, Barbil-7, Barbil-8. Total			
	C. Break up of Community Resource Augmentation Plan			
	Year – Wise Budget (INR)			
S. No.	Activity	1st year	2nd year	3rd year
				Total Budget (INR)
	RO with water cooler at 25 Govt. Schools/ Hospitals/ Panchayats/ each year (Total 75 nos. in 3 yrs) (unit price approx. 25,000/-)	6,25,000	6,25,000	6,25,000
	Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.			
	Distribution of 20 Computer every year in Govt. School (Total 60 nos. in 3 yrs) (unit price approx. 45,000/-)	9,00,000	9,00,000	9,00,000
	Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.			
	Goat farming promotion and financial assistance to locals at least 10 people every year (Total 30 nos. in 3 yrs) (unit price approx. 1,00,000/-)	10,00,000	10,00,000	10,00,000
	Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.			
	Poultry farming promotion and financial assistance to locals at least 10 people every year (Total 30 nos. in 3 yrs) (unit price approx. 50,000/-)	5,00,000	5,00,000	5,00,000
	Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.			
	Mushroom farming training	1,00,000	1,00,000	1,00,000

S. No	EC Conditions
	and financial assistance to 5 farmers every year (Total 15 nos. in 3 yrs) (unit price approx. 20,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8. Sewing machine distribution to local female for financial stability & income generation at least 20 every year (Total 60 nos. in 3 yrs) (unit price approx. 10,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8. Installation of Solar Panels in Govt. Schools, Hospitals, Panchayats in the Study Area 25 nos. of building every year (Total 75 nos. in 3 yrs) (unit price approx. 80,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8. Skill development programmes for young people with a target of 25 people every year (Total 75 nos. in 3 yrs) (unit price approx. 10,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8. Supply of Agriculture water pumps for locals on need based and promotion of sprinkling and drip irrigation for 10 nos. every year (Total 30 nos. in 3 yrs)
	2,00,000 2,00,000 2,00,000 6,00,000 20,00,000 20,00,000 20,00,000 60,00,000 2,50,000 2,50,000 2,50,000 7,50,000 5,00,000 5,00,000 5,00,000 15,00,000

S. No	EC Conditions
	(unit price approx. 50,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8. Awareness program for reduction of plastic waste reduction/ solid waste management in 10 villages every year (unit price approx. 20,000/- 2,00,000 2,00,000 2,00,000 6,00,000) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8. Medical camp organisation for locations/ providing medical equipment on need based to local Primary Health Center/ Hospitals at 3,00,000 3,00,000 4,00,000 10,00,000 Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8 Total 1,98,25,000
2.6	PP shall comply with the Order/Judgment passed by the JMFC Court Barbil, Odisha in 2(C).C.C Case No114/2013. Any subsequent orders, directions, or judgments issued by the Hon'ble Court from time to time shall also be complied.
2.7	Project proponent shall obtain CTE/CTO from Orissa Pollution Control Board (OPCB), as per the prevailing norms of OPCB.
2.8	The Project Proponent should install 3 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in consultation with OPCB. The real time data so generated should be displayed digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB/SPCB.
2.9	No blasting activities shall take place within 500 meters distance from school/habitation without the prior permission from DGMS. PP needs to undertake dense plantation near school and habitation. Additionally, one fog cannon shall be installed at each school in consultation with the school authorities within the core zone as well as within 500 m distance from the ML boundary.
2.10	PP needs to follow the SOTM recommended by NEERI with respect to transportation of mined out ore.

S. No	EC Conditions
2.11	PP should not overlap the list of activities of damage assessment, NRAP, CRAP with EMP, Public Hearing Commitments and CER activities.
2.12	The Project Proponent needs to submit the action taken report on plantation, damage recovery, Natural Resource Augmentation Plan (NRAP), Community Resource Augmentation Plan (CRAP) annually to the Ministry's Regional Office (at Bhubaneswar Odisha) which should be monitorable and verifiable. The period of addressing these issues is restricted to a period of 3 years.
2.13	The 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.
2.14	State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
2.15	OSPCB will issue CTE/CTO to the project only after compliance of condition (2.9) and (2.10) above.
2.16	CTO shall be granted in respect of only those land parcels/Khasra Numbers in the Revenue record which have been either acquired by Project Proponent or consent has been obtained from the landowners or from the concerned State Government, or their authorized agency, as the case maybe.
2.17	PP shall undertake a scientific study for characterization of overburden and associated waste materials to assess the potential presence and feasible recovery of rare earth elements / critical minerals, if any, in accordance with the applicable guidelines of the Ministry of Mines. In case the study establishes the presence of rare earth elements / critical minerals, the PP shall also examine the scope for their utilization and assess their market potential / value.
2.18	PP shall consult State Water Resource Department and SPCB for safeguarding the waterbodies within and around the lease area and follow their recommendations.
2.19	PP needs to ensure that no silt is discharged into waterbodies near and within the ML area. Proper gabions, check dams, drains and other structures should be erected constructed accordingly. PP shall maintain the safety distance of 50 m on side of the Dalki Nalla with the dense plantation inside the mine lease area. In order to properly maintain the safety barrier between the Dalki Nalla and the mine lease area, the Project Proponent shall create greenbelt on the either side of Dalki Nalla with safety distance of 50 m with thick plantation. PP shall also undertake dense plantation within the 50

S. No	EC Conditions
	m safety zone of Nalda pond.
2.20	PP needs to ensure that the reject/Waste shall be dumped in a scientifically designed and stabilized manner within the lease area, ensuring proper catch drains, toe walls and sedimentation pits to prevent erosion and siltation of nearby areas.
2.21	PP shall implement the conservation measure proposed in Wildlife Conservation Plan for the project with a financial outlay of Rs. 359.813 Lakhs. Project Proponent needs to use modern equipment such as Camera Traps for ensuring presence and movement of wild animals in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimize stress conditions for wild animals and to avoid Man-Animal conflict. Project Proponent should follow up with State Forest Department regarding implementation of Wildlife Conservation Plan. An implementation report in this regard needs to be submitted to Ministry's Regional office in half yearly compliance report.
2.22	PP needs to undertake water sprinkling along the transportation road, wherever necessary. Avenue plantation needs to be undertaken wherever necessary.
2.23	The mobile water tankers should be used in the ML area for dust suppression and control mitigation. A logbook of water tankers should be maintained mentioning running hours, kilometers reading, maintenance hours of water tankers for each shift.
2.24	The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of the training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment. Local villagers can be imparted training on mobile, laptop repairing, other electrical appliances repairing, welding, etc. so that they can get employments/ jobs. An implementation report in this regard shall be submitted to Ministry's Regional Office on an annual basis.
2.25	The Project Proponent shall monitor the air quality, noise level, water quality, water level at the edge of the mine, crusher, near the village and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office.
2.26	The Project Proponent needs to install the permanent fixed water sprinklers along the haul road and the approach road. Further, 08 nos. of fog canons/mist sprayer of at least 40 m throw shall be installed at various locations in the mine area (and/or other area prone to dust pollution). Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission.
2.27	PP shall take necessary measures to avoid generation of fugitive dust emissions.

S. No	EC Conditions
2.28	The Project Proponent needs to explore the possibility to reduce the water consumption by using non-toxic chemicals for haul road dust suppression.
2.29	The Project Proponent needs to complete the entire 7.5 m peripheral plantation, safety barrier plantation including crusher and gap plantation within three years. The Project Proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted (2500/ha) and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office. PP shall also ensure a minimum of 20% plantation through Miyawaki technique. A well-qualified horticulture specialist should be kept in the Environment Management Cell of the Project.
2.30	PP shall implement the protective measure proposed in Environment Management Plan (EMP) in a time-bound manner. The budget earmarked for the same is Rs 286 lakhs Lakhs (capital) and Rs 109.95 Lakhs (recurring up to lease period) and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
2.31	PP shall earmark and utilize the committed amount of Rs 369 Lakh exclusively for implementation of the PH commitments, which shall be distinct from Corporate Social Responsibility (CSR) activities. The year-wise action plan, physical and financial progress, and utilization of funds shall be uploaded on the project website, submitted to the Regional Office of MoEF&CC and the concerned SPCB/PCC, and reflected in the six-monthly compliance reports.
2.32	PP needs to explore the deployment of at least 20% electric vehicles for mining operation and 100 % electric vehicle for transportation of mine workers within 2 years.
2.33	PP to take adequate measures to prevent the pilferage of minerals during transportation. All dumpers should be covered with tarpaulin during transportation. Water sprinkling may also be undertaken at dust prone areas along the transportation route on regular basis leading to railway sidings. Fog cannons shall also be deployed at the railway siding. Traffic monitors may also be engaged at busy intersection and also near the Truck drivers, helpers, Operators, Supervisors, and contractor personnel should be properly trained on environmental aspects. A record of the above training of the personnel, supervisor/officials should be submitted to the regional office of MoEF&CC.
2.34	PP needs to install wheel-wash systems and fog cannons at loading and unloading points within the ML area.
2.35	Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue

S. No	EC Conditions
	Consent to Operate (CTO) till the project proponent obtains such permission.
2.36	The Project Proponent needs to provide the good quality RO drinking water supply to the nearby villages at free of cost.
2.37	The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on Silicosis shall be carried through regular occupational health check-up every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity.
2.38	The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office.
2.39	The Project Proponent shall conduct third party audit of compliance of EC condition at an interval of one year and its report shall be submitted to RO, MoEFCC.
2.40	PP needs to distribute seeds of native fruits and vegetables among the local farming communities on half-yearly basis among the project affected families.
2.41	PP should utilize the Oil & Grease Trap for washing of trucks, HEMM operational in their mine project. Disposal of the used oil & drums should be through authorized recyclers and as per rules. Copy of logbook of Oil withdrawn from Oil & Grease Trap should be submitted to the Regional Office of the Ministry.
2.42	PP shall ensure that all type of plastic waste generated from the mines shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 and its amendments. In pursuant to Ministry's OM dated 18/07/2022 PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall be submitted to Ministry's Regional Office.
2.43	Project proponent is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Greenbelt development. The action in this regard shall be submitted concerned RO in six monthly compliance report and the details of the same shall be uploaded in the MeriLife portal (https://merilife.nic.in).
2.44	The Project Proponent shall ensure that the mining lease remains valid throughout the operational period of the project. A copy of the valid lease deed/lease extension, with validity beyond

S. No	EC Conditions
	15.08.2026, shall be submitted to the Regional Office of the Ministry.
2.45	The Environmental Clearance is restricted to the mining area of 920.6 ha only. The balance area of 311.367 ha of forest land for which FC is yet to be obtained and 44.823 ha area occupied by industrial units and colonies etc., shall be physically demarcated on the ground by erecting closely spaced boundary pillars/fencing before commencement of mining operations. No activity shall be undertaken in the said area unless all requisite statutory approvals, and other applicable clearances, have been obtained. The Project Proponent shall obtain amendment in the Environmental Clearance from the Ministry before commencement of mining operations beyond the 920.6 ha mining area after obtaining all requisite statutory approvals and other applicable clearances.

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
1.2	State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
1.3	The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
1.4	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
1.5	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.
1.6	The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
1.7	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are

S. No	EC Conditions
	the part of mine lease areas or Habitations and villages are surrounded by the mine lease area.“
1.8	This Environmental Clearance (EC) is subject to orders/ judgment of Honble Supreme Court of India, Honble High Court, Honble NGT and any other Court of Law, Common Cause Conditions as may be applicable.

2.

S. No	EC Conditions
2.1	The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
2.2	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.

3. Air Quality Monitoring And Preservation

S. No	EC Conditions
3.1	Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.
3.2	The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.

4. Water Quality Monitoring And Preservation

S. No	EC Conditions
4.1	Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
4.2	Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.
4.3	Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
4.4	The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
4.5	Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
4.6	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.
4.7	The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution

S. No	EC Conditions
	Control Board/Committee.

5. Noise And Vibration Monitoring And Prevention

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

6. Mining Plan

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

7. Land Reclamation

S. No	EC Conditions
7.1	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

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

8. Transportation

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

9. Green Belt

S. No	EC Conditions
9.1	The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

10. Public Hearing And Human Health Issues

S. No	EC Conditions
10.1	Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

11. Corporate Environment Responsibility

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

12. Miscellaneous

S. No	EC Conditions
12.1	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
12.2	In pursuant to Ministrys O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Honble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
12.3	The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
12.4	Concealing factual data failure to comply with any or submission of false/ fabricated data and of the

S. No	EC Conditions
	conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
12.5	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
12.6	The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
12.7	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
12.8	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
12.9	The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
12.10	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.

Additional EC Conditions

The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.

Belkundi Iron & Manganese Ore Mine over an area of 1276.79 Hect. (as per RoR) /1276.949 Hect. (as per DGPS) with restriction of mining in an area of 965.423 ha for production capacity of 1.8 MTPA Iron Ore and 0.3 MTPA Manganese Ore along with installation of crusher capacity of 100 TPH, 200 TPH and Screening plant of 400 TPH and 200 TPH, by M/s The Orissa Minerals Development Company Limited located at village Belkundi, Nalda, Karakolha, Karakhendra, Uliburu Unit-1, Barbil-7 & 8 and Uliburu R.F in Barbil Tahasil, Sub-Division- Champua, Dist-Keonjhar, Odisha

The details of the project as per the information submitted by the project proponent are given under:

- (i). **M/s. Orissa Minerals Development Co. Ltd.** has made an application online vide proposal no. **IA/OR/MIN/497426/2024** dated **20.09.2024** along with the application in prescribed format (Form-I) and EIA/EMP. The proposed project activity is listed at Item No.1 (a) under Category “A” of the schedule of the EIA Notification, 2006 and is appraised at Central Level.
- (ii). PP had applied the proposal for obtaining Terms of Reference under S.O. 804(E) dated 14.03.2017. ToR was issued to the project on 29.05.2020.

(iii). Name of the project/activity (as applicable)

Applicable item no as per schedule of EIA, 2006	Project/activity	Capacity in Million Tons Per Annum	Area in Hectares (Ha)	Technological details
1(a)	a. Mineral name b. Crusher c. Screening plant	Iron - 1.8 Manganese-0.3 200 TPH (01) 100 TPH (01) 400TPH (01) 200 TPH (01)	1276.79 Hect. (as per RoR) /1276.949 Hect. (as per DGPS)	Mechanized open cast mining method with crushing and screening

**(iv). Compliance to the Common cause judgement of Hon’ble Supreme Court:
The details of demand raised by State DMG as submitted by PP is given as under:**

- PP submitted the demand notice dated 23.10.2017 raised by State DMG for Rs 3249279 for FC Violation.
- PP submitted the demand notice dated 23.10.2017 raised by State DMG for Rs 68622219 for MP & CTO violation.

- PP submitted the demand notice dated 02.09.2017 raised by State DMG for Rs 924497787 for EC violation.

In pursuance to the above demand notice raised in light of the Hon'ble Supreme Court Order dated 02.08.2017, OMDC paid an amount Rs 118.26 Crore towards the total penalty (including interest for delay payment). PP also submitted a letter dated 17.10.2019 issued by State Govt stating that full penalty in respect of Belkundi mining project has been paid by OMDC.

Subsequent to the payment of penalty, OMDC obtained order from Hon'ble Supreme Court on 29.01.2020 permitting resumption of mining subject to clearances being obtained.

(v). Legal action taken under EPA, 1986 for excess production:

Credible action taken by Govt. of Odisha by filing a case bearing no. 2(C) CC No,114/2013. The last date of hearing before the JMFC Court Barbil was on 30.08.2024.

(vi). Previous mining operations: -

PP submitted the past production details from 1992 to 2017-18 by the Deputy Director, Mines, Joda Circle, Keonjhar vide memo no. 474/Mines, dt. 20.02.2019. **The Committee observed that PP had gone for excess production of Manganese ore and Iron ore of 1993-1994 base year during the year 1994-1995, 1996-97, and 2000-2001 (for Manganese ore) and 2001 to 2007 (for Iron ore) without prior Environmental Clearance under EIA Notification 1994 and EIA 2006 (as amended).**

Production Figure of Belkundi Iron & Mn. Mines of M/S.OMDC. Ltd. for the period from 1992 to 2017-2018 as mentioned below:

Year	Iron ore	Manganese ore
1992-93	68115.500	33893.000
1993-94	28877.300	45831.229
1994-95	3695.000	107689.937
1995-96	9684.86	102641.886
1996-97	0	46164.251
1997-98	0	28391.400
1998-99	0	31285.000
1999-00	18185.000	31630.000
2000-01	8828.000	52820.000
2001-02	33135.000	31505.000
2002-03	260714.000	34035.000

Year	Iron ore	Manganese ore
2003-04	701550.000	17090.00
2004-05	438512.000	5555.00
2005-06	289140.000	2255.000
2006-07	223500.000	7285.00
2007-08	0	20367.000
2008-09	0	7556.00
2009-10	0	4800.000
2010-11	0	0
2011-12	0	0
2012-13	0	0
2013-14	0	0
2014-15	0	0
2015-16	0	0
2016-17	0	0
2017-18	0	0
Note:	PP reported that Mining operation stopped from 09.12.2009.	

(vii). **Environmental Site Settings:** The ML area is covered under Survey of India Topo sheet no 73 F/8(F45H8) and is bounded by the geographical coordinates ranging from **Latitude 22°07'41. 520"N to 22°09' 45.231" N and Longitude 85°23'03.481" E to 85°26'05.619"E**. Project does not fall in the Critically Polluted Area (CPA)/Severally Polluted Area (SPA), as per CEPI Assessment, 2018. Project falls in seismic zone - II of seismic zonation map of India.

(viii). **Forest Area:** The project involved total 695.907 ha. (including SABIK Forest) of forest land. The details of the approvals already obtained or applied for the forest land are as follows:

S. No.	Obtained vide letter no. and date	Area (ha)	Stage-I/II	Validity (Upto)
1	8-88/96-FC dtd.26.02.1998	384.54	Stage - II	15.08.2006
2.	8-88/1996-FC dtd.14.09.2022	384.54	Above order Co-terminus with lease period	15.08.2026
Total		384.54		

(ix). **Protected Area:** The project is not located within 10 KM of any ESZ/ ESA/ national park/ wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve/tiger corridor etc. PP has submitted a certificate/map authenticated by DFO, Keonjhar dated 15.05.2025.

(x). **Letter of Intent/ Lease deed:**

S. No.	Prospecting License/ Letter of Intent (LoI)/ Grant of Mine lease and Lr No	Date of the Grant	Name of the Mineral & (Major/ Minor)	Period of Grant	Granted by	Mine Lease Area in Ha.
1.	Lease status with validity	03.02.2020	Major	20 years (Up to 15.08.2026)	State Govt. of Odisha	1276.79

(xi). **Sensitive Receptors:**

S. No.	Particulars	Details	Remarks									
1.	Total ML area	1276.79 ha (Private :526.901 ha, Govt.: 749.889 ha)										
2.	Existence of habitation & involvement of R&R, if any.	Core zone: Name of village (if any) 1. Belkundi- within ML area 2.Nalda-within ML area 3. Kara-Kolha- within ML area 4. Kara Khendra-within ML area Buffer zone (Within 500 m): <table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Bara Jamda</td><td>0.1 Km</td><td>North</td></tr><tr><td>Barbil</td><td>0.5 Km</td><td>South</td></tr></table>	Habitation	Distance	Direction	Bara Jamda	0.1 Km	North	Barbil	0.5 Km	South	A study got conducted by M/s Shubhadra Consultant and report was prepared and submitted to Revenue and Disaster Management Dept., Govt. of Odisha. In response of this, a letter vide no. RDM-RRC-POLICY-0002-2023-9422/R&DM dated 14.03.2023 stating that “the land has not been acquired under L.A. Act, 1894 or RFCTLAR&R Act, 2013. Also, there is no displacement/ loss of livelihood in the project area. Its is a study report and does not contain any R&R plan. So, it does not require approval of Revenue & DM ”.
Habitation	Distance	Direction										
Bara Jamda	0.1 Km	North										
Barbil	0.5 Km	South										
3.	Existence of school and	A. School Core Zone: School name										

S. No.	Particulars	Details	Remarks												
	hospitals if any.	Nalda School (UP to High School) Karakhendra UP School Buffer zone (Within 500 m): <table><tr><th>School</th><th>Distance</th><th>Direction</th></tr><tr><td>Belkundi UP School</td><td>430 mtrs</td><td>South</td></tr></table> Core zone: Hospital name Nalda Govt. Hospital Buffer zone (Within 500 m):: <table><tr><th>Hospital</th><th>Distance</th><th>Direction</th></tr><tr><td colspan="3">Not Available</td></tr></table>	School	Distance	Direction	Belkundi UP School	430 mtrs	South	Hospital	Distance	Direction	Not Available			
School	Distance	Direction													
Belkundi UP School	430 mtrs	South													
Hospital	Distance	Direction													
Not Available															
4.	Elevation of the project site	485.50 M (Avg.) above mean sea level													
5.	Involvement of Forest land if any.	Total forest land – 695.907 ha Stage II Forest Clearance over 384.54 ha. Is valid up to 15.08.2026													
6.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Core Zone: Name: Dalki Nalla (A tributary of Karo River) Pond : Nalda Buffer zone (Within 500 m): <table><tr><th>Waterbody</th><th>Distance</th><th>Direction</th></tr><tr><td>Karakolha Pond</td><td>350 mtrs.</td><td>South</td></tr></table>	Waterbody	Distance	Direction	Karakolha Pond	350 mtrs.	South	Dalki Nalla :HFL -442.00 mtr. from MSL Authenticated HFL data obtained from the office of the Chief Engineer, Minor Irrigation Department, Govt of Odisha vide letter NO WO-III-Misc-KJR-16/2025/13803/M.I dated 11.12.2025						
Waterbody	Distance	Direction													
Karakolha Pond	350 mtrs.	South													
7.	Railway Line	Core Zone: Deepak, Rashmi, Jay Balaji Rly. Siding Buffer zone (Within 500 m): TK -1 , TK-2, Tourian Rly. Siding	OMDC has requested to Principal Chief Operation Manger, South Eastern Railway for required permission vide letter No OMDC/HO/TECH/05/2025 /287 dated 06.5.2025												

S. No.	Particulars	Details	Remarks
8.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ Tiger Corridor/ Elephant Corridor /elephant reserve etc. if any within the study area	None	Required certificate obtained from DFO, Keonjhar Forest Division, Odisha and a Map showing the location of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ Tiger Corridor/ Elephant Corridor /elephant reserve etc from project has been authenticated by DFO, Keonjhar dated 15.05.2025.
9.	Archaeological sites monuments/ historical temples etc.	None	
10.	Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score	None	
11.	Projects located adjacent to Aravalli/ GIB Priority area/ either fully (or) partially within GIB area /Taj	None	

S. No.	Particulars	Details	Remarks
	Trapezium Zone		
12.	Projects located in the State of Odisha Keonjhar, Sundergarh	Keonjhar district	Proponent assured that 70 % of total ore produced will be transported by Rail network only and remaining 30% will be transported by road network as committed.

(xii). Diversions proposed/ previously diverted if any

S. No.	Diversions proposed/ previously diverted	Details
1	Water body	Dalki nala is flowing inside ML area, safety zone maintained at both side of same. The same nala is 2 .0 km away from the proposed Iron Ore quarry
2	Habitation	Habitation is 1.5 km away from Zadu Pit, there is no requirement of diversion
3	School	The nearby School is 1.6 km from proposed Quarry
4	Gauchar land/Grazing land	There is no Grazing land inside ML area
5	Forest land	Total Mining Lease area is 1276.79Ha Total forest area is 695.907 Ha. Total Non-Forest land 580.883 Ha Diversion of Forest land over 384.54 ha. has been approved vide MoEF &CC letter no.8-88/96 FC dtd.26.02.1998 & subsequent letter for co-terminus with lease period vide no.8-88/96 FC dtd.14.09.2022. OMDC modified the mining plan to comply the condition of ADS and the same was approved by IBM on 08.04.2025 for mining activity shall be restricted in already diverted forest land over 384.54 Ha for which Stage-II FC is available
6	Road	None
7	Transmission line	None
8	Any other	None

(xiii). **Mitigation measures proposed for the sensitive receptors**

S.No	Receptors	Proposed mitigation measures
a)	Habitation	The Mining activity is 1.5 km away from habitation area. There will be no impact on Habitation.
b)	School	- do-
c)	Water Body	-do-
d)	Other	-do-

(xiv). **Mining Plan and Progressive Mine Closure Plan If available):** The mining plan & mine closure plan for the project was approved by the IBM vide letter no. RMP-2438/2025-26-IBM_RO_BBS dated 27.02.2026.

SN	Items	Details
1)	Geological Mineral Resources in Tonnes	Iron :28.596 MTPA Mn. :13.985 MTPA
2)	Mineable Mineral reserve in tonnes	Iron :24.625 MTPA Mn. :11.183 MTPA
3)	Type of mining (opencast/Underground/Both)	Opencast Mining
4)	Proposed production (MTPA)	Iron : 1.80 MTPA Mn. : 0.30 MTPA
5)	Life of mines with proposed production capacity in years	Iron : 14 years Mn. : 37 years
6)	Blasting methodology	Control Blasting
7)	Details of transportation:	
	a) Pit to Surface/Crusher	Dumper - 10
	b) Surface to siding	Dumper - 10
	c) Siding to loading	
	d) Quantity being transported by Road/Rail/Jetty/Sea tanker/conveyer: By Rail: 1.26 of Iron Ore MTPA & Road: 0.54 MTPA of Iron Ore	By Railway/ Road
8)	Crushing details type / capacity per hr and protective measure proposed	Proposed crusher = 2 nos. (01 crusher capacity of 200 TPH and 01 crusher capacity of 100 TPH). Possible Protective measures will be taken up

SN	Items	Details
		to minimize dust emission during crushing.

(xv). **Year wise Development & Production**

Year	Total ROM (In Million Tonnes)	Total handling (In Million Tonnes)	Total overburden waste (Million Tonnes) (overburden)	OB to Ore Ratio
1 st year 2026-27	2.1	2.36	0.26	0.12
2027-28	2.1	2.16	0.06	0.03
2028-29	2.1	2.38	0.28	0.13
2029-30	2.1	2.32	0.13	0.06
2030-31	2.1	2.19	0.09	0.05

(xvi). **Proposed Dump Configuration**

	The proposed final dump configuration is as follows			
(i)	Dump Type	Area (ha)	Height (m)	Quantity Mm³
(ii)	04 nos. New Dump	4.52	Avg. - 6.0 mtrs.	2,04,000

(xvii). **Existing Dump Configuration**

	The existing final dump configuration is as follows			
(i)	Dump Type	Area (ha)	Height (m)	Quantity Mm³
(ii)	Active (35 nos.)	Total Area-25.85	Avg. - 6.7 mtrs.	17,91,300

(xviii). **Waste Management**

S. No	Particular	Quantity (Million)	Waste Management		
			Dump	Backfilling	

		Tonnes)	Dump area (Ha)	Quantity (Million Tonnes)	Height (m)	Backfilled area (Ha)	Quantity (Tonnes)	Depth (m)	Others (Specify)
1.	Since Inception (In case, proposal is for expansion)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	As per Annexure
2.	Plan Period	0.184	3.20	0.184	Avg. -6.0 mtr	Nil	Nil	Nil	
3.	Conceptual Period	Nil	Nil	Nil	Nil	Nil	Nil	Nil	

(xix). **Details of Solid and Hazardous Waste Management:** The details of solid and hazardous waste generation along with its mode of treatment/disposal are furnished as below:

Name of the Waste	Source	Qty (TPA)	Mode of Disposal	Mode of Transport
Used Oil	D.G. Set and Machineries	45	Sent to Authorized vendors	Road

(xx). **Land use and land change**

A	Pre-mining land use pattern:	Within ML Area (Ha.)
a)	Mining	127.650
b)	Mineral Storage	8.390
c)	Mineral Beneficiation Plant	9.000
d)	Township	9.960
e)	Railways	7.440
f)	Roads	8.910
g)	Infrastructures (Workshop, Administrative Building etc.	9.640

A	Pre-mining land use pattern:	Within ML Area (Ha.)
h)	OB/ Waste Dump	21.330
i)	Others	41.000
h)	Undisturbed Area	1033.470
	Total	1276.790

B	Post -mining land use pattern:	Within ML Area (Ha.)
a)	Mined out area under water reservoir	5.85
b)	Mined out area reclaimed and plantation	252.53
c)	Stabilization of dump area	26.33
d)	Area under utility service	119.86
e)	Virgin area under green belt	30.00
e)	Undisturbed virgin area	842.22
	Total	1276.790

(xxi). **Details of Water Requirement:** PP submitted that the total water requirement for the said project is 200 KLD. Source of water shall be 120KLD of Surface water from Nalda Pond of OMDC Ltd. & 80 KLD of Ground Water from Bore wells, which to be constructed after resumption of Mining Operation.

Source of Water: - Surface & Ground

Ground Water Intersection: No

Water Requirement: - Total - 200 KLD

NOC (For surface water): - Agreement shall be done with water resource department, Govt. of Odisha before commencement of project.

Ground water clearance obtained from CGWA vide letter no. CGWA/ NOC/ MIN/ ORIG/ 2021/ 10964 for 80 KLD with validity up to 15/02/2025. It will be renewed before commencement of project after issuance of EC.

(xxii). **Details of Power Requirement:** The power requirement of the said project has been estimated to be 0.45 MW.

(xxiii). **Plantation:** Existing plantation has been developed in 23.40 ha area which is about 1.833 % of the total ML area of 1276.79 ha with total sapling of 37440 Trees. Proposed greenbelt and plantation will be developed in 308.86 ha (Mined out area reclaimed plantation of 252.53Ha and area under dump plantation of 26.33 + virgin area under green belt- 30.00) which is about 24.19 % of the total ML area. A 7.5 m wide greenbelt, consisting of at least 3 tiers around mine boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species

will be planted with a density of 2500 trees per hectare. Total no. of 7,71,400 saplings will be planted in conceptual plan period.

Proposed Action plan for greenbelt and plantation

Year	Greenbelt Development Area in Ha				Total (Ha)	No. of Saplings	Budget (in lakh Rs.)	
	7.5 m Barrier Zone	50 m Safety zone for Road/ Conceptual stage	50 m Safety Zone for Nala/ Conceptual stage	50m Safety Zone for Rly. Line/ Conceptual stage			Capital @ Rs 100 per sapling	Recurring @ Rs. 15 per sapling
2026 - 2031	4.0	0.00	0.00	0.00	4.00	10000	10.00	1.50
2031 - 2036	0.00	16.00	16.00	9.00	41.00	102500	102.50	15.375
2036 - 2041	0.00	16.00	16.00	9.00	41.00	102500	102.50	15.375
2041 - 2046	0.00	15.00	15.00	8.00	38.00	95000	95.00	14.25
2046 - 2051	0.00	15.00	15.00	8.00	38.00	95000	95.00	14.25
2051 - 2056	0.00	14.00	14.00	7.00	35.00	87500	87.50	13.125
2056 - 2062	0.00	14.00	14.00	7.00	35.00	87500	87.50	13.125
2062 - 2067	0.00	13.00	13.00	6.00	32.00	80000	80.00	12.00
2067 - 2071	0.00	13.00	13.00	6.00	32.00	80000	80.00	12.00
2071 - 2073	0.00	5.00	5.00	2.56	12.56	31400	31.40	4.71

Year	Greenbelt Development Area in Ha				Total (Ha)	No. of Saplings	Budget (in lakh Rs.)	
	7.5 m Barrier Zone	50 m Safety zone for Road/ Conceptual stage	50 m Safety Zone for Nala/ Conceptual stage	50m Safety Zone for Rly. Line/ Conceptual stage			Capital @ Rs 100 per sapling	Recurring @ Rs. 15 per sapling
Total	4.0	33.58	30.00	7.44	308.86	771400	771.40	115.71

Expected Survival Rate: 80%

Type of Species:

- Azadirachta Indica (Neem)
- Mangifer Indica (Mango)
- Tamarindus Indica (Tamarind)
- Dalbergia Sisoo (Sisoo)
- Pongamia Pinnata (Karanja)

Note: Local trees/plant species will be planted @ 2500 trees/Ha.

(xxiv). **Rehabilitation & Resettlement Plan:** A study got conducted by M/s Shubhadra Consultant and report was prepared and submitted to Revenue and Disaster Management Dept., Govt. of Odisha. In response of this, a letter vide no. RDM-RRC-POLICY-0002-2023-9422/R&DM dated 14.03.2023 stating that “the land has not been acquired under L.A. Act, 1894 or RFCTLAR&R Act, 2013. Also, there is no displacement/ loss of livelihood in the project area. Its is a study report and does not contain any R&R plan. So, it does not require approval of Revenue & DM”.

(xxv). **Project Cost:** The total cost of the project is Rs. 121.08 Crs.

(xxvi). **Baseline Environmental status and impact assessment:** Baseline Data collected for winter season (December 2025 to February 2026)

Period	Baseline Data collected for the period Oct to Dec 2019 supplemented by Dec 2025 to Feb- 2026
AAQ parameters at 2 core zone and 6 buffer zone Locations (min and max)	Core Zone: PM_{2.5} = 29.71 to 45.7 µg/m³ PM₁₀ = 51.45 to 70.64 µg/m³ SO₂ = 8.4 to 12.16 µg/m³ NO_x = 14.14 to 20.56 µg/m³ CO: 0.41 to 1.12 mg/m³ Buffer Zone:

Period	Baseline Data collected for the period Oct to Dec 2019 supplemented by Dec 2025 to Feb- 2026
	$PM_{2.5} = 30.64 \text{ to } 54.48 \mu\text{g}/\text{m}^3$ $PM_{10} = 58.24 \text{ to } 73.09 \mu\text{g}/\text{m}^3$ $SO_2 = 7.02 \text{ to } 12.20 \mu\text{g}/\text{m}^3$ $NO_x = 13.02 \text{ to } 20.75 \mu\text{g}/\text{m}^3$ $CO: 0.28 \text{ to } 1.03 \text{ mg}/\text{m}^3$
Incremental GLC level	$PM_{2.5} = 1.75 \mu\text{g}/\text{m}^3$ (Level at 0.5km in SW Direction) $PM_{10} = 1.37 \mu\text{g}/\text{m}^3$ (Level at 0.5km in SW Direction) $SO_2 = 2.65 \mu\text{g}/\text{m}^3$ (Level at 0.5 km in SW Direction) $Nox = 2.01 \mu\text{g}/\text{m}^3$ (Level at 0.5 km in SW Direction)
Noise levels Leq (Day and Night) at 2 core zone and 6 buffer zone Locations (min and max)(Day and Night)	Industrial zone: - Day Time Noise Level: 52.4 to 53.7 dB(A) - Night Time Noise Level: 34.8 to 49.6 dB(A) Residential zone: - Day Time Noise Level: 43.9 to 54.8 dB(A) - Night Time Noise Level: 35.7 to 38.5 dB(A)
Ground water quality at 5 Locations(min and max)	- pH: 6.88 to 7.04 - Total Dissolved Solids (TDS): 60 to 98 mg/l - Total Hardness: 31 to 56 mg/l - Chlorides: 7 to 10 mg/l - Calcium: 8.0 to 15.6 mg/l - Magnesium: 2.7 to 4.1 mg/l - Total Alkalinity: 27 to 48 mg/l - Sulphate: 1.4 to 2.8 mg/l - Nitrate: 0.98 to 1.98 mg/l - Fluoride: <0.05 to <0.05 mg/l - Sodium: 4.0 to 6.0 mg/l - Potassium: 0.4 to 0.7 mg/l - Iron: 0.07 to 0.14 mg/l - Residual Free Chlorine: <0.2 to <0.2 mg/l - Cyanide: <0.02 to <0.02 mg/l - Total Chromium: <0.05 to <0.05 mg/l - Boron: <0.01 to <0.01 mg/l - Manganese: <0.05 to <0.05 mg/l - Phenolic Compounds: <0.1 to <0.1 mg/l

Period	Baseline Data collected for the period Oct to Dec 2019 supplemented by Dec 2025 to Feb- 2026
	• Copper: <0.02 to <0.02 mg/l • Mercury: <0.001 to <0.001 mg/l • Aluminium: <0.02 to <0.02 mg/l • Cadmium: <0.001 to <0.001 mg/l • Zinc: <0.02 to <0.02 mg/l • Lead: <0.01 to <0.01 mg/l • Selenium: <0.001 to <0.001 mg/l • Arsenic: <0.001 to <0.001 mg/l • Mineral Oil: ND to ND • Anionic Detergents (as MBAS): ND to ND • Total Coliform: <2.0 to <2.0 MPN/100 ml
Surface water quality at 2 Locations(min and max)	• pH: 7.22 to 7.26 • Turbidity: <1.0 to <1.0 NTU • Conductivity: 173.1 to 185.6 µS/cm • TDS: 107 to 114 mg/l • Chloride: 17 to 18 mg/l • Cyanide (as CN): <0.02 to <0.02 mg/l • Hexavalent Chromium (Cr⁶⁺): <0.05 to <0.05 mg/l • Iron (as Fe): 0.26 to 0.28 mg/l • Sulphate (as SO₄): 3.9 to 4.1 mg/l • Nitrate (as NO₃): 1.46 to 1.58 mg/l • Fluoride (as F): <0.05 to <0.05 mg/l • DO: 6.2 to 6.3 mg/l • BOD: <2.0 to <2.0 mg/l • COD: 12 to 15 mg/l • Oil & Grease: <2.0 to <2.0 mg/l • Phenolic Compounds: <0.001 to <0.001 mg/l • Copper (as Cu): 0.05 to 0.06 mg/l • Lead (as Pb): <0.01 to <0.01 mg/l • Zinc (as Zn): 0.09 to 0.12 mg/l • Arsenic (as As): <0.001 to <0.001 mg/l • Selenium (as Se): <0.001 to <0.001 mg/l • Cadmium (as Cd): <0.001 to <0.001 mg/l • Total Coliform: <2.0 to <2.0 MPN/100 ml.
Soil quality analysis at 8 locations- 2 core zone and 6 buffer zone Locations (min and max)	Core Zone : • Moisture Content: 13.34 to 14.42 % • Bulk Density: 1.45 to 1.48 g/cc • Specific Gravity: 2.65 to 2.70 • pH: 7.42 to 7.62

Period	Baseline Data collected for the period Oct to Dec 2019 supplemented by Dec 2025 to Feb- 2026
	- Electrical Conductivity (EC): 55.23 to 61.64 $\mu\text{S/cm}$ - Organic Carbon Content: 0.62 to 0.78 % - Sulphate: 52 to 111 mg/kg - Nitrogen (as N): 38.94 to 75.11 kg/ha - Calcium (as Ca): 378 to 422 mg/kg - Magnesium (as Mg): 180 to 212 mg/kg - Phosphorus (as P): 23.12 to 25.87 kg/ha - Potassium (as K): 100.72 to 199.68 mg/kg - Chloride (as Cl): 0.87 to 0.99 % - Manganese (as Mn): 2.84 to 4.56 mg/kg - Iron (as Fe): 2.16 to 3.23 % - Colour: Brown - Soil Texture: Sandy Clay Buffer Zone: - Moisture Content: 12.17 to 17.04 % - Bulk Density: 1.43 to 1.54 g/cc - Specific Gravity: 2.65 to 2.65Gs - pH: 7.92 to 8.74 - Electrical Conductivity (EC): 66.58 to 94.66 $\mu\text{S/cm}$ - Organic Carbon Content: 0.58 to 0.84 % - Sulphate: 104 to 118 mg/kg - Nitrogen (as N): 37.22 to 73.93 kg/ha - Calcium (as Ca): 364 to 380 mg/kg - Magnesium (as Mg): 172 to 178 mg/kg - Phosphorus (as P): 19.53 to 36.28 kg/ha - Potassium (as K): 133.78 to 255.26 mg/kg - Chloride (as Cl): 0.82 to 0.96 % - Manganese (as Mn): 2.64 to 4.50 mg/kg - Iron (as Fe): 2.57 to 3.13 % - Colour: Brown - Soil Texture: Sandy Clay

Period	Baseline Data collected for the period Oct to Dec 2019 supplemented by Dec 2025 to Feb- 2026				
Effluent generation details and its treatment	Effluent to be generated from mechanical garage will be treated through ETP. Domestic effluent to be generated from canteen and colony will be treated through STP.				
Traffic assessment study findings	- Traffic study has been conducted around the road network of Belkundi Iron and manganese Mines - Transportation of raw material will be done through trucks to the railway sidings. - Existing PCU and existing level of service (LOS) are:				
	Road	Peak hour V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS
	Mines to SH-10 at Barbil	195	1600	0.121	“A”
	Bhadrasahi-Barbil – Barjamda SH-10 State Highway	910	3000	0.303	“B”
	Barbil Chwak to Barbil siding	1023	3000	0.341	“B”
	National Highway (NH-520) passes through Bhadrasahi	1609	4300	0.374	“B”
	PCU load and level of service (LOS) after proposed project will be :				
	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Proposed V/C Ratio	LOS
	Mines to SH-10 at Barbil	240	1600	0.150	“A”
	Bhadrasahi-Barbil – Barjamda SH-10	955	3000	0.318	“B”

Period	Baseline Data collected for the period Oct to Dec 2019 supplemented by Dec 2025 to Feb- 2026				
	State Highway				
	Barbil Chwak to Barbil siding	1048	3000	0.349	“B”
	National Highway (NH-520) passes through Bhadrasahi	1629	4300	0.378	“B”
	* Note: Capacity as per IRC: 106:1990 and IRC: 64:1990 Guide line for capacity for roads. (Only for road transport). Conclusion: The level of service will remain same after including additional traffic due to proposed project.				
	Sl.no	Particulars of activity		Quantity	
	A	Material Transported (TPA)		2100000	
	B	No of days in a year		330	
	C	Daily Material to be transported in TPD (A/B)		6364	
	D	Transport hours per day		18	
	E	Hourly Material to be transported in TPH (C/D)		354	
	F	Truck capacity in T (Avg.)		30	
		Trips per hour		11.8 (12 Trips/hr)	
Flora and fauna	24 Schedule-I species were reported in the project impact area and 4 schedule-I species reported with core zone. Elephant & Sloth Bear, Memo No - 4074/CWLW-FDWC-FD-0108-2024 dated 04th April 2025.				
	Schedule-I Fauna (Core zone)				
Sl. No.	English Name	Zoological Name	Schedule As per WPA, 1972 and WPA-2022		
Mammals					
1	Jackal	Canis aureus	I		

Period	Baseline Data collected for the period Oct to Dec 2019 supplemented by Dec 2025 to Feb- 2026			
	2	Small Indian Civet	<i>Viverricula indica</i>	I
	Reptiles			
	3	Common Rat Snake	<i>Ptyas mucoas</i>	I
	4	Python	<i>Python molurus</i>	I
	Schedule -I Fauna (Buffer zone)			
	Sl. No.	English Name	Zoological Name	Schedule As per WPA, 1972 and WPA 2022
	Mammals			
	5	Civet / Katasha	<i>Paradoxurus hermaphroditus</i>	I
	6	Common Mongoose / Hatia Neula	<i>Urva edwardsii</i>	I
	7	Elephant	<i>Elephas maximus</i>	I
	8	Fishing Cat	<i>Prionailurus viverrinus</i>	I
	9	Hyena / Hetabagha	<i>Hyena heyna</i>	I
	10	Indian Porcupine / Jhinka	<i>Hystrix indica</i>	I
	11	Jackal / Bilua	<i>Canis aureus</i>	I
	12	Jungle Cat / Bana Biradi	<i>Felis chaus</i>	I
	13	Kuji Neula	<i>Urva javanicus</i>	I
	14	Leopard	<i>Panthera pardus</i>	I
	15	Otter	<i>Lutra lutra</i>	I
	16	Bonnet Macaque	<i>Macaca radiata</i>	I
	17	Sloth Bear	<i>Melursus ursinus</i>	I
	Sl. No.	English Name	Zoological Name	Schedule As per WPA,

Period	Baseline Data collected for the period Oct to Dec 2019 supplemented by Dec 2025 to Feb- 2026			
				1972 and WPA,2022
	Reptiles			
	18	Cobra / Gokhra	<i>Naja naja</i>	I
	19	Monitor Lizard	<i>Varanus bengalensis</i>	I
	20	Python	<i>Python molurus</i>	I
	21	Russell's Viper	<i>Daboia russelii</i>	I
	22	Yellow Rat Snake	<i>Ptyas mucosa</i>	I
	BIRDS			
	Sl. No.	English Name	Zoological Name	Schedule As per WPA, 1972 and WPA 2022
	23	Peacock / Peafowl	<i>Pavo cristatus</i>	I
	24	Shikra / Baja Pakshi	<i>Accipiter badius</i>	I
Hydrogeology study	Ground water table will not be intersected during mining. Hence, there will not be any impact on ground water regime of the lease area and its surroundings.			
Impact study on bio-diversity and aquatic ecology	Site Specific Wildlife Conservation Plan approved by PCCF (Wildlife) & Chief Wildlife Warden, Odisha vide order no.4074/CWLW-FDWC-FD-0108-2024 dated 04.04.2025 with a budgetary allocation of Rs.359.813 lakh.			

(xxvii). Public Consultation

Details of advertisement given for rescheduled public hearing	22.07.2024, The Times of India & Dharitri
Date of public consultation	11:00 AM on 17.08.2024
Venue and distance from project site	Venue- Mouza - Barbil, Unit -7,. Barbil Tehsil, Keonjhar District Distance from the project site is 3.5 km
Presiding Officer	ADM – Sri. Jadumani Mahala, ADM, Keonjhar

	RO – Er. Prasanta Kar, RO, SPCB, Keonjhar
Number of representations received in writing from the district and outside of district:	Verbal Representation- 88 Written representation - 20
Major issues raised	Demanded Employment to locals and Concern about environment related to local environment.
No. of people attended	269

Action plan as per MoEF&CC O.M. dated 30/09/2020

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
			1 st year	2 nd Year	3 rd year	
1.0						
i	Measures for protection of Forest & Environment during mining activities.	Construction of 6 no's Check dams at Dalki Nala passing through Belkundi, Dalki, Nalda to arrest silt.	Belkundi Village 2nos: 6.00	Dalki Village 2nos: 6.00	Nalda Village 2nos: 6.00	51.00
		Awareness's creation at nearby villages through Organization camps, Training Programmes for environment and Forest protection on quarterly basis at each villages(Thakurani, Barbil, Shanta bahal)	6.00	6.00	6.00	
		Construction of Plastic Waste and Solid waste Handling Facility at Thakurani,	Thakurani village 5.00	Barbil 5.00	Shanta Bahal 5.00	

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
			1 st year	2 nd Year	3 rd year	
1.0		Barbil, Shanta bahal				
ii	Identification of specific Transportation Route & Dust control in this Routes particularly passing through Habitation areas	Stone pitching at road side from mine pit boundary to nearest siding/ Village / District Road Junction, progressively at Karakhola, Nalda and Karakhandra) 4.5 km	Karakhola 1.0 km 10.00	Nalda 1.0 km 10.00	Karakhandra 2.5 km 25.00	66.00
		Deployment of Water sprinklers/ spray on regular roads used in transportation (at least @ 03 trips per day from mine pit boundary to nearest siding / Village/ District Road Junction)	Karakhola, Nalda, Karakhandra 5km 7.00	Karakhola, Nalda, Karakhandra 5km 7.00	Karakhola, Nalda, Karakhandra 5km 7.00	
iii	Measures to prevent health hazards in Barbil areas due to air and water pollution	Regular Monitoring of Environmental parameters on quarterly basis at core zone and villages Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7 & Barbil-8.	6.00	6.00	6.00	81.00

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
1.0			1 st year	2 nd Year	3 rd year	
		Regular monitoring of health conditions (bi-annual medical camps & expected beneficiary 500 people)	5.00	5.00	5.00	
		Distribution of Community RO Units to villages Karakhendra, Karakolha, Thakurani (02 numbers/ year)	Karakhendra 2nos 16.00	Karakolha 2 nos 16.00	Thakurani 2 nos 16.00	
iv	Protection of Agricultural Lands of Belkundi, Karakhendra, Karakolha & from Runoff discharge from mines &.	To arrest rainwater discharge from Belkundi Mines additionally, construction of Garland Drains (02 numbers) with size 15m X 1.0m X 1.0m Gully Plugs/ Check Dams (02 numbers) with 3.0 m wide Settling Ponds (04 numbers) with 20.0sqm. each	10.0	Nil	Nil	10.00
v	Restoration of Thakurani Nallah by digging up Belkundi which get	Restoration of Thakurani Nallah by scientific measures like	5.0	Nil	Nil	5.00

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
			1 st year	2 nd Year	3 rd year	
1.0						
	dried up due to wastes dumps.	Desilting (150 m X 50 m), Pitching and green turfing of banks (500 m length), Berms on the banks construction of retaining wall/ gully plugs/check dams wherever required				
vi	Rejuvenation of Karo River to maintain natural flow & plantation along 5 Km stretch to increase flow in River	Rejuvenation of nallah feeding the Karo River, in regular stretches of 1.0 to 1.5 km per year. Protection of the Nallah passing across the ML extent with Provide Safety Zone of 50.0m width on either side, Construction of retaining wall with garland drain along the length of the nallah outside the Safety Zone on either side of the nallah 02 nos. (2.0m X 2.0m) wherever	Provide Safety Zone of 50.0m width on either side 5.00	Construction of Retaining wall, Garland drains 5.00	Nil	10.00

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
1.0			1 st year	2 nd Year	3 rd year	
		necessary / on hilly terrains. Construction of gully plugs/check dams wherever required				
1.0 Sub-Total (Environmental issues)						223.00
2.0 Peripheral Issues/Activity						
2	Employment		1 st year	2 nd year	3 rd Year	
i	Priority for locals/ directly affected people/ hatting youths in employment based on qualification	Skill development training will be provided for the locals i.e. tailoring, farming SHG schemes etc to increase employability and earning capacity of nearby villagers of Belkundi, Thakurani, Dalki	Belkundi 10.00	Thakurani 10.00	Dalki 10.00	30.00
ii	Deployment of local vehicles & engagement of local drivers for mining activities	Priority will be given to local vehicles & engagement of local Petty Contractors in construction works & other Mining activities 50 % vehicle /drivers shall be	-	-	-	-

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
			1 st year	2 nd Year	3 rd year	
1.0		engaged from Local area				
iii	Engagement of local Petty contractors in construction works & other mining activities	Priority will be given to the engagement of local Petty Contractors in construction works & other mining activities. It is estimated 40 nos of laborers shall be engaged for such work and 90 % of laborers shall be engaged from Local area.	-	-	-	-
2.0 Sub-Total						30.00
3.0	Adoption of manual mining instead of mechanized mining	PP has proposed to restart production of Mn ore from Belkundi Iron & Mn ore mines by open cast mechanized mining methods such as drilling blasting, loading, stacking, dumping & transportation. However, following tasks will be carried out manually such as ore segregation sorting picking sizing surveying	-	-	--	-

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
1.0			1 st year	2 nd Year	3 rd year	
		plantation, transportation housekeeping wards and watching etc. Total 20 person per day shall be engaged from Local area				
i	Provision of Skill Development Program & Technical Training to Local Youths for better employment opportunities	Assistance for Skill development program & arrangement of technical training to local Youths for better employment opportunities	3.00	3.00	3.00	9.00
ii	Development of Education facilities in the Nalda area	Repairing and renovation facilities will be provided to the nearby Government schools at villages Nalda, Karakohla and Dalki.	Nalda School 3.00	Karakohla School 3.00	Dalki School 3.00	9.00
3.0 Sub-total						18.00
4.0	Electricity facilities to each Houses of local villages	Common electricity Infrastructure shall be provided for villagers of Dalki, Belkundi, Thakurani same shall be maintained regularly	Belkundi 10.00	Dalki 5.00	Thakurani 5.00	20.00

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
1.0			1 st year	2 nd Year	3 rd year	
4.0 Sub-total						20.00
5.0	Health Care					
i	Development of Health facilities for locals	Ambulance has been provided for local villagers and deployed at Hospital of OMDC exist at Thakurani, Barbil. The Hospital will be upgraded to accommodate Barbil and nearby villages.	2.00	2.00	2.00	6.00
ii	Opening of Hospital at Barbil	Infrastructural development shall be done at Hospital present at Badbil.	5.00	5.00	5.00	15.00
iii	Steps to prevent Dengue	Awareness camp shall be arranged at nearby villages for prevention and treatment for Dengue Karakhendra, Karkohla, Shantabahal	Karakhendra 1.00	Karkohla, 1.00	Shantabahal 1.00	3.00
5.0 Sub-Total						24.00
6.0	Drinking water supply to each house of Local villages to avoid Iron Water Issues	Common water supply infrastructure shall be provided at nearby villages. Beneficiary: One Cluster of	Uliburu 7.00	Barbil-7 7.00	Barbil-8 7.00	21.00

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
			1 st year	2 nd Year	3 rd year	
1.0		50 households/year. Population of villages of , Uliburu, Barbil-7, Barbil-8				
6.0 Sub-Total						21.00
7.0 Other Developmental work						
i	Ensure Socio-economic Developments of Local people	In consultation with BDO, Tahsildar Village Sarpanch measure will be undertaken for socio-economic developments at Soyabali, Dalki, Thakurani	Soybali 10.00	Dalki 5.00	Thakurani 5.00	20.00
ii	Establishment of right communication facilities with locals through dedicated personnel	Each activity shall be carried out with consultation with BDO, Tahsildar, Sarpanch . Local interaction cell shall be established at mine headed by mines manager and welfare officer from OMDC as regular member. Two local persons shall be nominated by sarpanch shall be the member with meeting at	2.00	2.00	2.00	6.00

S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in lakhs			Total Expenditure (Rs. in Lakh)
1.0			1 st year	2 nd Year	3 rd year	
		quarterly basis to address the issues.				
iii	Steps to control accidents	Implementation of DGMS guidelines Speed restriction at 20KMPH while crossing the habitation Awareness, Sign board & safety campaign, training & re-training of mine employees etc.	3.00	2.00	2.00	7.00
7.0 Sub-Total						33.00
Total						369.00

(xxviii). The capital cost of the proposed project is Rs 121.08 Crores and the capital cost for environmental protection measures is proposed as Rs 286 lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 109.95 lakhs. The employment generation from the proposed project / expansion is 814 manpower. The details of cost for environmental protection measures are as follows:

Sl No	Parameters	Source/Activity	Mitigation Measures	Budget (Rs. Lakhs)	
				Capital Cost	Recurring Cost per annum
1		Land Development	Minimize clearing and Restoration of Topsoil	10.0	4.2
		Drilling and Blasting	- Water Sprinkling - Blast during off-		

Sl No	Parameters	Source/Activity	Mitigation Measures	Budget (Rs. Lakhs)	
				Capital Cost	Recurring Cost per annum
	Air Pollution		peak hours • Controlled blasting • Use of Water drilling machine fitted with water injector system	30.0	4.0
		Excavation	• Construct retaining walls, Garland Drain, Settling pit	20.0	1.5
		Transportation	• To cover trucks with Tarpaulin • Maintain Vehicles regularly • Design proper haul roads • Wheel Washing system	25.0	2.5
		1.Sub-total (Air Pollution)		85.0	12.2
2	Water Pollution	Contamination of Ground water and Surface water due to Mining Activity	• No Ground water intersection • STP installation and operation • Surface Runoff management system • ETP for Mechanical service center • Maintenance of Rainwater harvesting structures in and around mine, re-charge pond	25.0	15.0
3	Land Degradation	Land degradation due to Excavation	Grass turfing, coir matting at strategic areas, Plantation maintenance	5.0	6.0

Sl No	Parameters	Source/Activity	Mitigation Measures	Budget (Rs. Lakhs)	
				Capital Cost	Recurring Cost per annum
4	Noise Pollution	Noise generation due to movement of Heavy machineries, transport vehicle	Provision of PPEs Regular maintenance of Machineries Awareness creation among employees	3.0	1.75
5	Pollution due to Waste generating Mine (Solid wastes, E-Waste, Hazardous Waste, Plastic Waste)	OB generation due to Mining Used Oil /waste lubricant generation at Mechanical workshop E-waste, Plastic waste generation at Admin Building	Dumping as per approved mining Plan Management of Hazardous waste, E-waste, Plastic waste and other waste as per CPCB rule Regular training and awareness creation among employees	15.0	2.0
6	Pollution Measurement	Environmental Monitoring for the parameters viz air, water, nosie	Establish a comprehensive monitoring system for air, water, and soil quality; conduct regular audits and report findings -	-	-
			Three No's of CAAQMS (Continuous Ambient Air Quality Monitoring Station)	150.0	15.0
			Third Party Ambient Air Quality Monitoring	-	30.0
			Soil Quality	-	1.0
			Water Quality	-	2.0
			Noise	-	1.0
			Health Check up	-	5.0
6. Sub-Total (Pollution Measurement)				150.0	54.00

Sl No	Parameters	Source/Activity	Mitigation Measures	Budget (Rs. Lakhs)	
				Capital Cost	Recurring Cost per annum
7	Awareness	Environmental Awareness, Implementation of ISO 14001, Awareness among Local villagers Provision of Solar lights to villagers	Training and awareness to Employees	3.0	19.00
Grand Total (1+2+3+4+5+6+7)				286.0	109.95

(xxix). Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases

S. No	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
1	2(C).C.C.case No. 114/2013	JMFC Court, Barbil, Odisha	Credible action taken by Govt. of Odisha	03.10.2024	Awaited	Follow up for conclusion

➤ PP has submitted an undertaking dated 12.06.2026 in this regard.

B. Summary of active Show Cause Notices – Nil

C. Summary of violation

PP submitted the past production details from 1992 to 2017-18 by the Deputy Director, Mines, Joda Circle, Keonjhar vide memo no. 474/Mines, dt. 20.02.2019. The Committee observed that PP had gone for excess production of Manganese ore and Iron ore of 1993-1994 base year during the year 1994-1995 (for Manganese ore) and 2001-2002 (for Iron ore) without prior Environmental Clearance under EIA Notification 1994. Hence instant mining proposal is under violation since 1994 and confirmed that the instant proposal confirmed the case to be of violation of the EIA Notification, 2006 and as per the provisions of the MoEF&CC Notification dated 14th March, 2017. PP also submitted the demand notice no. 5144/Mines, dated 23.10.2017 from the Office of the Deputy Director of Mines, Joda Circle to pay sum of Rs. 3249279/- (Rupees Thirty-Two Lakhs Forty-Nine Thousand Two Hundred Seventy-Nine Only) towards compensation under Section 21(5) of MMDR Act, 1957 for production without the Forest Clearance as

rationalized by the CEC, in pursuance to the judgment dt. 02.08.2017 of Hon'ble Supreme Court in the matter of W.P. (C) No. 114/14 Common Cause vs UOI and others and Demand notice no.5248/Mines, dt. 23/10/2017 by the Deputy Director, Mines, Joda Circle, Keonjhar to pay sum of Rs. 68622219/- (Rupees Six Crore Eight Six Lakhs Twenty-Two Thousand Two Hundred Nineteen Only) towards compensation under Section 21(5) of MMDR Act, 1957 for production without Excess of the Mining Plan & CTO as rationalized by the CEC, in pursuance to the Judgment dt. 02.08.2017 of Hon'ble Supreme Court in the matter of W.P. (C) No. 114/14 Common Cause Vs UOI.

Any violation case pertaining to the project on following: i. The Environment Protection Act, 1986 ii. Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980. iii. The Wild Life (Protection) Act, 1972	i. OMDC has undertaken production of Iron Ore & Manganese Ore from the mining lease hold area without Environment Clearance (EC), during the period from 2000-01 to 2010-11. In pursuance to the Hon'ble Supreme Court Order dated 02.08.2017, Govt. of Odisha imposed penalty of Rs.92.45 Crore towards violation of EC. ii. OMDC has undertaken production of Iron Ore & Manganese Ore from the mining lease hold area in violation of Forest Conservation Act,1980 during the period from 07.01.1998 to 31.03.2011. In pursuance to the Hon'ble Supreme Court Order dated 02.08.2017, Govt. of Odisha imposed penalty of Rs.0.32 Crore towards violation of FC. OMDC paid an amount of Rs 109.75 crore including interest towards EC and FC Violation. Further w.r.t CTO violation a penalty of Rs 6.86 crore was raised by State Govt. and OMDC paid Rs 8.51 crore including interest. In total OMDC paid an amount Rs 118.26 Crore towards the total penalty (including interest for delay payment). OMDC obtained order from Hon'ble Supreme Court on 29.01.2020 permitting resumption of mining subject to clearances being obtained. iii. None
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(xxx). **Damage Assessment as per Ministry's Notification dated 14.03.2017**

S. No.	Particulars	Proposed Capital Budget (INR)
1.	Remediation Plan	1,04,66,000/-
2.	Natural Resource Augmentation Plan	1,78,50,000
3.	Community Resource Augmentation Plan	1,98,25,000
Total		INR 4,81,41,000/-

A. Break up of Remediation plan

S. No.	Particulars	Remediation Budget (INR)			Total budget (INR)
		1 st year	2 nd year	3 rd year	
1.	Land Environment Plantation Location: Village Panchayat, Primary Health Centers, Hospitals, Schools and Other available open spaces. Plant Species: Karanja (<i>Pongamia Glabra</i>), Simaria (<i>Bursera simaruba</i>), Neem (<i>Azadirachta</i>), Sumarua (<i>Samanea saman</i>), Chhatian (<i>Alstoniascholaris</i>), Mango (<i>Mangifera indica</i>), Kadamba (<i>Neolama Corekiacadamba</i>) etc. Approx. 1800 Plants Per Year Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8. Location: Water sprinkling at approach Road from Mine to 500 m distance towards villages/habitation with frequency of daily basis. Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	14,05,334	14,05,334	14,05,334	42,16,000
2.	Air Environment (Monitoring) Air Monitoring: Proposed at 8 locations on a quarterly basis frequency. Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8, Barajamda, Murgabehra.	5,00,000	5,00,000	5,00,000	15,00,000
3.	Water Environment Rainwater Harvesting: RWH and Construction of septic tank & soak pits. Total No. of RWH = 2 Buildings Per Year	4,00,000	3,00,000	3,00,000	10,00,000

	Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8, Barajamda, Murgabehra.				
4.	Noise Environment	2,50,000	2,50,000	2,50,000	7,50,000
	Noise Monitoring: Noise Monitoring proposed at 6 locations near ML Boundary on a quarterly basis and Earbuds/ earplugs for workers safety. Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7.				
	Vibration Monitoring: At Six locations around Mine Lease within 500 m locations of Lease periphery. Monitoring Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
5.	Biological Environment	7,50,000	7,50,000	7,50,000	22,50,000
	Flora - Plantation (as per schedule) and green belt development in inside premises. Plantation Location: Village Panchayat, Primary Health Centers, Hospitals, Schools and Other available open spaces. Plant Species: Karanja (<i>Pongamia Glabra</i>), Simaria (<i>Bursera simaruba</i>), Neem (<i>Azadirachta</i>), Sumarua (<i>Samanea saman</i>), Chhatian (<i>Alstoniascholaris</i>), Mango (<i>Mangifera indica</i>), Kadamba (<i>Neolama Corekiacadamba</i>) etc. Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
	Fauna - Conservation of schedule-I species in the study area.) As per approved site-specific wildlife conservation plan vide no. 4074/CWLW-FDWC-FD-0108-2024 dated 04 th April 2025.				
6.	Socio-Economic Environment	2,50,000	2,50,000	2,50,000	7,50,000
	(Solar lights = Total 10 nos. per year @ Rs. 25,000/- with pole) Beneficiary Villages: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu.				
Total					1,04,66,000/-
Note: Recurring cost considered @10% of the total cost. Hence, it is Rs. 10,46,600/- .					

B. Break up of Natural Resource Augmentation Plan

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1st year	2nd year	3rd year	
	Avenue Plantation (2500 m)	7,50,000	7,50,000	7,50,000	22,50,000
	500 plants with tree guards on each side of the road (1000 plants x Rs. 750 each) and its	1,00,000	1,00,000	1,00,000	3,00,000

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1st year	2nd year	3rd year	
	maintenance till self-sustenance (1000 x 100) Locations: Nalda, Karakhendra, Belkundi, Karakolha				
Sub-total		8,50,000	8,50,000	8,50,000	25,50,000
	Installation of Rainwater harvesting at 15 buildings per year in nearby Govt. Schools/ Hospitals/ Panchayats/ Community Centers/ Other premises in study area/ Keonjhar district. (45 nos.) (unit price approx. 2,00,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	30,00,000	30,00,000	30,00,000	90,00,000
	Recharge Ponds for groundwater recharge in 15 structures every year with minimum dimensions of 5x4x3 m = 60 Cu.m each (45 nos.) (unit price approx. 1,40,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	21,00,000	21,00,000	21,00,000	63,00,000
Total					1,78,50,000

C. Break up of Community Resource Augmentation Plan

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1st year	2nd year	3rd year	
	RO with water cooler at 25 Govt. Schools/ Hospitals/ Panchayats/ each year (Total 75 nos. in 3 yrs) (unit price approx. 25,000/-)	6,25,000	6,25,000	6,25,000	18,75,000

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1st year	2nd year	3rd year	
	Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
	Distribution of 20 Computer every year in Govt. School (Total 60 nos. in 3 yrs) (unit price approx. 45,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	9,00,000	9,00,000	9,00,000	27,00,000
	Goat farming promotion and financial assistance to locals at least 10 people every year (Total 30 nos. in 3 yrs) (unit price approx. 1,00,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	10,00,000	10,00,000	10,00,000	30,00,000
	Poultry farming promotion and financial assistance to locals at least 10 people every year (Total 30 nos. in 3 yrs) (unit price approx. 50,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	5,00,000	5,00,000	5,00,000	15,00,000
	Mushroom farming training and financial assistance to 5 farmers every year (Total 15 nos. in 3 yrs) (unit price approx. 20,000/-) Beneficiary Locations: Nalda, Karakhendra,	1,00,000	1,00,000	1,00,000	3,00,000

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1st year	2nd year	3rd year	
	Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
	Sewing machine distribution to local female for financial stability & income generation at least 20 every year (Total 60 nos. in 3 yrs) (unit price approx. 10,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	2,00,000	2,00,000	2,00,000	6,00,000
	Installation of Solar Panels in Govt. Schools, Hospitals, Panchayats in the Study Area 25 nos. of building every year (Total 75 nos. in 3 yrs) (unit price approx. 80,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	20,00,000	20,00,000	20,00,000	60,00,000
	Skill development programmes for young people with a target of 25 people every year (Total 75 nos. in 3 yrs) (unit price approx. 10,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	2,50,000	2,50,000	2,50,000	7,50,000
	Supply of Agriculture water pumps for locals on need based and promotion of sprinkling and drip irrigation for 10 nos. every year (Total 30 nos. in 3 yrs) (unit price approx. 50,000/-)	5,00,000	5,00,000	5,00,000	15,00,000

S. No.	Activity	Year – Wise Budget (INR)			Total Budget (INR)
		1st year	2nd year	3rd year	
	Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.				
	Awareness program for reduction of plastic waste reduction/ solid waste management in 10 villages every year (unit price approx. 20,000/-) Beneficiary Locations: Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8.	2,00,000	2,00,000	2,00,000	6,00,000
	Medical camp organisation for locations/ providing medical equipment on need based to local Primary Health Center/ Hospitals at Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7, Barbil-8	3,00,000	3,00,000	4,00,000	10,00,000
	Total				1,98,25,000

The above plan was deliberated in detail in presence of co-opted expert member Dr.S.R.Wate, Former Director of NEERI and found to be satisfactory.

- (xxxi). **Comments of State Pollution Control Board, as per Ministry's OM dated 14.01.2025 and SOP dated 08.10.2025-** CTE was obtained on 07.10.2024 and valid up to 06.10.2029.
- (xxxii). Name of the EIA consultant: Wolchem India (New Consultant-M/s EHS 360 Labs Private Limited [S. No.71 List of ACOs with their Certificate / Extension Letter no NABET/EIA/25-28/RA 041 Valid up to 16.07.2028.)
- (xxxiii). **Undertaking/Affidavit:** PP vide letter dated 12.06.2026 submitted that, the information provided in CAF, Form 1- Part A, B and C in physical form and/or in pdf format in PARIVESH, to the Ministry/ EAC members and PPT presentation during the EAC meeting to be held on 30.06.2026 have no deviation in respect of the proposal no. IA/OR/MIN/497426/2024 for proposal title. Further certified that there are no data entry errors in the information uploaded in PARIVESH system including names/ email-

id/ mobile numbers/ address of the project proponent, authorized person, etc. It is also certified that the supporting documents uploaded on PARIVESH portal are correct and duly authenticated by the Authorized Signatory. In case of any deviation in data found in any of the documents, the Authorized Signatory shall be held responsible and furthermore, the above said project shall be rejected for grant of Environment Clearance.

- **Affidavit:** The project proponent has submitted an Affidavit as per Ministry's OM dated 30.05.2018 bearing no. N687657 dated 26.09.2024.

(xxxiv). ADS Information in chronology

M/s. OMDC Ltd made an online application vide proposal no. **IA/OR/MIN/497426/2024 dated 20.09.2024**. The proposal was initially considered in 34th EAC meeting of EAC (Non-Coal Mining) held on 04.10.2024 wherein Proposal was deferred for want of additional information. OMDC had submitted reply to ADS on 09.04.2025. Further, EAC (NCM) considered this proposal in 43rd meeting held on 22-23rd April, 2025 wherein the Committee deferred the proposal for want of additional information. Further, EAC (NCM) considered this proposal in 8th meeting held on 29-30th June 2026 wherein the Committee deferred the proposal for want of additional information. PP had submitted reply.

ADS-1. The proponent submitted the ADS reply vide letter dated 09.04.2025 against ADS raised in 34th EAC meeting dated 04.10.2024 uploaded on PARIVESH on 09.04.2025. Point-wise reply of ADS is given as below

S. No.	ADS Point	Reply/ Response of PP
1	The Project Proponent must submit either the Stage-I Forest Clearance (FC) for the remaining forest area or a restrictive mining plan for the already diverted forest land (384.54 ha), for which Stage-II FC is available, and the non-forest land (580.883 ha).	Mining plan (restricting over the already diverted forest land and the non-forest land) is approved by IBM vide No. RMP-2351/2024-25-IBM_RO_BBS dated 08.04.2025 with validity till 31.03.2026. Copy of approval letter is submitted as Annexure-I.
2	The Project Proponent is required to submit the site-specific wildlife conservation plan along with proof of its submission to the Forest Department.	The Site-Specific Wildlife Conservation Plan has approved vide no. 4074/CWLW-FDWC-FD-0108-2024 dated 04th April 2025. Copy is submitted as Annexure-II.
3	The Project Proponent must upload the complete Environmental Impact Assessment (EIA) and Environmental	Complete EIA & EMP report along with all relevant Annexures is uploaded on Parivesh Portal.

S. No.	ADS Point	Reply/ Response of PP																																
	Management Plan (EMP) report on the Parivesh Portal.																																	
4	The Project Proponent needs to submit an action plan to ensure that more than 70% of the ore is transported through the railway siding, with the remaining 30% transported by road.	The suggestion of the Hon'ble Committee is noted and management of OMDC Limited will try to incorporate the same by adopting the following activities: For Railway Siding The possibility of 70% ore transportation through railway siding will be explored and implemented after obtaining requisite approval from railways. Details of railway siding available within 10 km radius are as below: <table><tr><th>S. No.</th><th>Railway Siding / Station</th><th>Location</th><th>Distance (km)</th></tr><tr><td>1</td><td>Bara Jamda Siding</td><td>Barajamda, Jharkhand</td><td>0.32</td></tr><tr><td>2</td><td>Barbil Train Station</td><td>Odisha</td><td>3.24</td></tr><tr><td>3</td><td>Gua Train Station</td><td>Jharkhand</td><td>6.53</td></tr><tr><td>4</td><td>Deojhar Train Station</td><td>Mahadebanasa, Odisha</td><td>7.67</td></tr><tr><td>5</td><td>Murga Mahadev Road Train Station</td><td>Sialijoda, Odisha</td><td>8.76</td></tr><tr><td>6</td><td>Noamundi Train Station</td><td>Jharkhand</td><td>8.96</td></tr><tr><td>7</td><td>Joda Block Cabin Train Station</td><td>Lahanda, Joda, Odisha</td><td>10.00</td></tr></table> Note: Availability of railway racks is subjected to approval by the office of railways. For Transportation by Road The remaining 30% ore shall be transported through the road.	S. No.	Railway Siding / Station	Location	Distance (km)	1	Bara Jamda Siding	Barajamda, Jharkhand	0.32	2	Barbil Train Station	Odisha	3.24	3	Gua Train Station	Jharkhand	6.53	4	Deojhar Train Station	Mahadebanasa, Odisha	7.67	5	Murga Mahadev Road Train Station	Sialijoda, Odisha	8.76	6	Noamundi Train Station	Jharkhand	8.96	7	Joda Block Cabin Train Station	Lahanda, Joda, Odisha	10.00
S. No.	Railway Siding / Station	Location	Distance (km)																															
1	Bara Jamda Siding	Barajamda, Jharkhand	0.32																															
2	Barbil Train Station	Odisha	3.24																															
3	Gua Train Station	Jharkhand	6.53																															
4	Deojhar Train Station	Mahadebanasa, Odisha	7.67																															
5	Murga Mahadev Road Train Station	Sialijoda, Odisha	8.76																															
6	Noamundi Train Station	Jharkhand	8.96																															
7	Joda Block Cabin Train Station	Lahanda, Joda, Odisha	10.00																															

S. No.	ADS Point	Reply/ Response of PP
		- No transportation of minerals will be allowed through the roads passing through villages/habitations. - Dispatch is done only through National Highway/ State Highway. PUC checks will be mandatory on a regular basis. - Speed restrictions on vehicles will be imposed to avoid any unforeseen event.
5	The Project Proponent should provide an action plan for the construction of rain water harvesting facilities within the Note: Availability of railway racks is subjected to approval by the office of railways.	- Project proponent is conscious towards the use of natural resources and planning to use ground water for drinking and domestic purposes only in future operations. - For mining and associated operations, rain water stored on the mine pit will be used. - However, till the validity of present NOC of CGWA, ground water will be used initially as the company has already paid the abstraction charges.

Measures For Rainwater Harvesting

Proposed depth of working and ground water levels indicate that there is no possibility of puncture of ground water table in plan period and seepage/accumulation of ground water on the quarry floor. The source of water in the mine are:

(a) Rainfall / direct precipitated water and

(b) Surface run-off water from the adjacent pit top area at higher levels around the pit/ quarry.

However, the quantity of water likely to be encountered in the pit is estimated below

Parameter / Description	Quantity
Pit area at the end of plan period	160.528 /ha 1,605,280m ²
Adjacent pit top area (10% of pit area)	160,528m ²
Total catchment area	1,765,808m ²
Annual rainfall	1,503 / 1.503 mm / m
Total volume of rainfall	2,654,010m ³
Rainwater evapo-transpired	1,327,005m ³
Rainwater seepage to sub-surface	530,802m ³
Rainwater accumulated in the pit	796,203m ³

Annual rainfall, catchments area and likely quantity of rainwater to flow through the lease area: Average annual rainfall is 1503.3mm. The south-west monsoon lasts from mid-June to mid-September and the area receives more than 70% to 80% of the annual rainfall during the period. Likely quantity of rainwater to flow through the lease area has been calculated as follows:

S. No.	ADS Point	Reply/ Response of PP		
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Description		Quantity
Quarry as well as surrounding area		176.581 / 1,765,808ha / m ²
Remaining area in the M.L. area		1,276.790 / 12,767,900ha / m ²
Total M.L. Area		1,453.371 / 14,533,710ha / m ²
Annual rainfall		1,503.3 / 1.503mm / m
Total volume of rainwater		21,844,166m ³
Rainwater evapo-transpired		10,922,083m ³
Rainwater seepage into sub-surface		4,368,833m ³
Rainwater likely to flow in the lease area		6,553,250m ³

Arrangement for arresting solid wash off: Protective measures like retaining wall, garland drain and settling tank will be built up around the lower level of waste dumps to arrest the wash-off materials and release clean water. Boulders of waste materials will be utilized for construction of retaining walls. Sand and cement will be used for the binding of the boulders. Garland drains will be developed around waste dump beyond the retaining wall to receive run-off water coming out of the retaining wall and settling tank will be made en-route to receive the run-off water from garland drain to settle the sediments and release clean water. Details of the construction/ arrangement and maintenance around waste dumps for arresting solid wash-offs in the plan period will be as follows:

Year	Location	Retaining Wall (L × W × H) meters	Garland Drain (L × W × D) meters	Settling Tank (L × W × D) meters
1st Year (2025-26)	Dump-ID/1	350 × 1.0 × 1.5	350 × 1.0 × 1.0	10 × 5 × 3
	Dump-MD/1	325 × 1.0 × 1.5	325 × 1.0 × 1.0	10 × 5 × 3
	Dump-MD/2	250 × 1.0 × 1.5	250 × 1.0 × 1.0	10 × 5 × 3
2nd Year (2026-27)	Dump-ID/1	350 × 1.0 × 1.5	350 × 1.0 × 1.0	—
	Dump-MD/1	325 × 1.0 × 1.5	325 × 1.0 × 1	—
	Dump-MD/2	250 × 1.0 × 1.5	250 × 1.0 × 1.0	—
Balance Period	All Dumps	Maintenance	Maintenance	Maintenance

The retaining wall will be repaired/ maintained, and garland drain as well as settling tank will be cleaned/ de-silted throughout the plan period as and when necessitated preferably just after the monsoon seasons.

6	The Project Proponent is required to revise the	As suggested by the Hon'ble Committee, the Remediation Plan and Natural and Community
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S. No.	ADS Point	Reply/ Response of PP
	budget for the proposed remediation plan and the natural and community resource augmentation plan, taking into account the damages to the receptors.	Resource Augmentation Plan has been revised considering the receptors i.e. affected due to mineral transportation from mine lease to dispatch point. Now, after revision, the total cost is Rs. 4,81,41,000/-. A copy is submitted as Annexure III.
7	The budget for plantation of 6,20,310 trees over 400 ha needs to be submitted with timeline for plantation. The proposed amount of Rs. 7.5 lakh for plantation under EMP is not adequate given the types of plants selected. Accordingly, PP needs to submit the revised budget.	The Plantation programme with respect to timeline and cost of plantation has been revised.

Year / Stage	Location	Area (Ha.)	No. of Plants	Species Proposed / Existing
Existing Plantation	Lease boundary, Mined out area & Reclaimed area	23.40	23,400	Local & endemic species such as: • Karanja (<i>Pongamia glabra</i>)
2025-26	Safety Zone + Available open area	14.50	10,000	• Simaria (<i>Bursera simaruba</i>) • Neem (<i>Azadirachta</i>)
2026-27	Safety Zone + Available open area	57.13	44,945	• Sumarua (<i>Samanea saman</i>)
Till Conceptual Stage	Safety Zone + Dumps & Other available areas	326.31	5,41,965	• Chhatian (<i>Alstonia scholaris</i>) • Mango (<i>Mangifera indica</i>) • Kadamba (<i>Neolamarckia cadamba</i>)
Total	—	421.34	6,20,310	—

ADS-2: The proponent submitted the ADS reply vide letter dated 21.05.2025 against ADS raised on 03.05.2025. Point-wise reply of ADS is given as below:

S. No.	ADS Point	Reply/ Response of PP	
1	PP needs to submit the Monitorable and Tangible Environmental Management plan excluding the budget allocated for Public Hearing.	Updated monitorable and tangible Environmental Management Plan excluding the budget allocated for Action Plan for points raised in Public Hearing, is as given below:	
S. No.	Particulars	Proposed Cost (Rs. In Lakhs)	
		Capital	Recurring
1	Pollution Control & Conservation of Natural Resources - Water sprinkler (for a linear road length of 2.5 km. approx.) - Retaining wall - 01nos, size (200m x 2.0m x 2.0m) X 2 years - Garland Drain - 01nos, size (200m x 2.0m x 2.0m) X 2 years - Settling/ Septic Tank– 06nos., size (5.0mX3.0mX3.0m) Location–within Mine pit & surrounding area	25.0	04.00
2	Environmental Pollution Monitoring - Parameters - Air, Noise, Soil, Water - Frequency – Quarterly monitoring Locations – At core zone and villages Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7 & 8.	07.00	02.00
	Installation of CAAQMS	90.0	05.0
3	Occupational Health & Safety including Risk assessments, Improving the work environment, Training & awareness programs, and implementing various safety protocols etc. Frequency – Quarterly monitoring Programs/ campaigns on Forest Fire Prevention	04.50	02.50
4	Green Belt Development within ML area (20,000 saplings per annum@ Rs. 200/- per unit) Plant Species: Karanja (<i>Pongamia Glabra</i>), Simaria (<i>Bursera simaruba</i>), Neem (<i>Azadirachta</i>), Sumarua (<i>Samanea saman</i>), Chhatian (<i>Alstoniascholaris</i>), Mango (<i>Mangifera indica</i>), Kadamba (<i>Neolama Corekiacadamba</i>) etc.	40.0	05.00

S. No.	ADS Point	Reply/ Response of PP	
	Location –Safety Zone belt, Open area, Dumps, Approach Road, Avenue plantation etc.		
5	Miscellaneous (Fencing (100 m), Protection, regeneration and maintenance of safety zone)	06.00	03.00
6	Proposed Expenditure towards Site Specific Conservation Plan (Five Years Duration)	359.813	-
Total		532.313	21.50
2	PP needs to submit the Monitorable and Tangible Public Hearing action plan.	Updated monitorable and tangible Action Plan for points raised in Public Hearing is enclosed as Annexure-I of updated ADS reply sent vide mail on 12.06.2026	
3	PP needs to submit the Monitorable and Tangible Remediation Plan & Natural and Community Resource Augmentation Plan.	Updated monitorable and tangible Modified Remediation Plan & Natural and Community Resource Augmentation Plan is enclosed as Annexure-II of updated ADS reply sent vide mail on 12.06.2026.	
4	PP needs to submit a copy of the certificate from State Forest Department regarding the presence of National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Eco-Sensitive Zone within 10 km study area.	A certification dated 15.05.2025 from the Office of The Divisional Forest Officer, Keonjhar Division of State Forest Department stating that there is “ NO ” National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Eco-Sensitive Zone within 10 km study area. Copy enclosed as Annexure-III of updated ADS reply sent vide mail on 12.06.2026.	
5	The Project Proponent needs to consult Railway Department to obtain permissions for separate railway rakes from the nearest Railway siding for transporting the mined-out ore.	Requested the Office of PCOM, South-Eastern Railways, Kolkata vide letter/e-mail dated 06.05.2025 for allowing usage of TK-1 & TK-2 sidings (OMDC’s Private sidings) and also allotment of rakes regularly both at Barbil and Bara Jamda Public Sidings for transportation of mined out minerals from Bagiaburu Mines presently and Belkundi Mines once it is operationalised. Copy enclosed as Annexure-IV of updated ADS reply sent vide mail on 12.06.2026. ❖ Issue has been taken up with SER vide our letter dated 31.07.2025 for deputing a team to take up joint inspection for accessing the operationalization of the sidings.	

S. No.	ADS Point	Reply/ Response of PP
		❖ Discussion have been held with 02 (two) consultants empaneled with Railway. ❖ M/s RITES had made a field visit during August'2025 and has submitted scope of work on 05.01.2026 for carrying out Feasibility Study and modification works.
6	The Project Proponent needs to consult Stated Water Resource Department with respect to the nallah present in the ML area.	Submitted a request to the Office of The Chief Engineer, Minor Irrigation, Dept. of Water Resources, Bhubaneswar vide its letter no. OMDC/ HO/TECH./05/2025/288 dated 07.05.2025. Copy enclosed as Annexure-V of updated ADS reply sent vide mail on 12.06.2026. The Chief Engineer, Minor Irrigation, Odisha, Bhubaneswar vide letter dated 11.12.2025 has submitted the HFL data of the Nalla. Copy enclosed as Annexure-VI of updated ADS reply sent vide mail on 12.06.2026.
7	The Project Proponent needs to obtain a clarification from the State DMG regarding the presence of sponge iron and pellet plant within the ML area. State DMG should indicate whether the above plant areas shall be removed from the lease while executing the lease deed?	Submitted the information to the State DMG, Govt. of Odisha vide letter dated 17.05.2025 in this regard. Copy enclosed as Annexure-VII of updated ADS reply sent vide mail on 12.06.2026. DMG vide letter dated 19.05.2026, clarified that removal / exclusion of the said plant area can be considered only after receipt of a formal surrender application from OMDC. Copy enclosed as Annexure-VIII of updated ADS reply sent vide mail on 12.06.2026. Final Mine Closure Plan (part surrender) over area of 44.823 ha was approved by IBM on 24.03.2026. This covers Sponge Iron Plant, Pellet Plant of M/s Rungta Mines Ltd. Copy enclosed as Annexure-IX of updated ADS reply sent vide mail on 12.06.2026. The application is already submitted to IBM-RCOM, BBSR for issuance of certificate under MCDR Rule 21 (4). Copy enclosed as Annexure-X of updated ADS reply sent vide mail on 12.06.2026. The above work may take some time. Since the present lease period is due to expire on 15.08.2026, hence execution of the Lease

S. No.	ADS Point	Reply/ Response of PP	
		Deed for the period from 16.08.2006 to 15.08.2026 will be done over total lease area of 1276.79 ha. in the absence of surrender of the land.	
8	PP also needs to submit the details of the area within the ML for which it has already obtained Surface Rights since the instant mine was under operation earlier.	The surface right obtained over an area 386.383 ha. Copy enclosed as Annexure-XI of updated ADS reply sent vide mail on 12.06.2026.	
9	The Project Proponent needs to submit detailed information regarding the geological reserves and mineable reserves available within the ML area.	As per approved Review of Mining Plan vide No. RMP-2438/2025-26-IBM_RO_BBS dated 27.02.2026, details are as below:	
S. No.	Particulars	Iron Ore	Manganese Ore
a	Geological Reserves (in tons)	2,85,96,000	1,39,84,900
b	Mineable Reserves (in tons)	2,46,25,480	1,11,83,260
10	PP needs to submit communication with Indian Bureau of Mines regarding reserve and production plans in the ML area after exclusion of areas of the sponge iron and pellet plant. PP also needs to explain about the partial mine closure that was reported and discussed by them during EAC meeting.	Submitted information to the Office of The Regional Controller of Indian Bureau of Mines; Bhubaneswar vide mail dated 09.05.2025. Copy enclosed as Annexure-XII of updated ADS reply sent vide mail on 12.06.2026. Further, Final Mine Closure Plan (part surrender) over area of 44.823 ha was approved by IBM on 24.03.2026. This covers Sponge Iron Plant and Pellet Plant of M/s Rungta Mines Ltd. Review of Mining Plan (RMP) for the period from 01.04.2026 to 15.08.2026 was approved by IBM on 27.02.2026, in which production plan is estimated / projected by excluding the areas of sponge iron and pellet plant. Copy of approval by IBM enclosed as Annexure-XIII of updated ADS reply sent vide mail on 12.06.2026.	
11	PP needs to inform DGMS regarding sponge iron and pellet plant within the lease area and transportation of ore/ finished products for these plants within the lease area.	Submitted information to the Office of The Director of Mines Safety, DGMS, Bhubaneswar vide letter no. OMDC/HO/TECH/05/2025/289 dated 07.05.2025.	

S. No.	ADS Point	Reply/ Response of PP																														
		Copy enclosed as Annexure-XIV of updated ADS reply sent vide mail on 12.06.2026.																														
12	In the EIA-EMP report, PP should include the impacts of sponge iron plants and pellet plant in the lease area on the air, water, land, noise, etc. environment. Mitigation plans should also be mentioned in the EIA- EMP report.	The project proponent of the sponge iron plant, pellet plant M/s Rungta Mines Ltd. have obtained the following statutory clearances from the respective Competent Authorities: EC 1:J-11011/230/2016 - IAI(I) dated 15.01.2018. EC 2:J-11011/230/2016 - IAI(I) dated 07.08.2019. EC 3:J-11011/230/2016 - IAI(I) dated 24.01.2022. CTE:3375/IND-II-CTE-6893 dated 06.03.2023. CTO:1711/IND-I-CON-6645 dated 29.01.2025. The same has been mentioned in the EIA & EMP Report as directed. The mitigation measures as suggested in the accorded EC (pg.no.4 of 6) of M/s Rungta Mines Ltd. (Source: EC Letter uploaded on PARIVESH Portal) are as below:																														
A) Impact on Water Environment: There shall be no major impact on water environment due to the sponge iron plant, pellet plant M/s Rungta Mines Ltd. as out of total 105 KLD water demand, 101 KLD water demand will be met through harvested rainwater stored in raw water reservoir. Entire wastewater will be reused within plant for sprinkling after treatment in OWS, settling tanks and common sump. B) Impact on Air Environment: There shall be no major negative impact on air environment as bag filters are installed to control the pollutants along with other mitigation measures as plantation, use of solar energy etc. Cumulative Impact of Air Quality as per Predicted GLC's <table><tr><th>Particulars</th><th>(PM₁₀)</th><th>(PM_{2.5})</th><th>(SO₂)</th><th>(NO_x)</th></tr><tr><td>Baseline Scenario (Max)</td><td>69.90</td><td>44.33</td><td>11.02</td><td>19.54</td></tr><tr><td>Predicted GLC (Max) (Area Source by Belkundi Iron and Mn Ore Mine)</td><td>1.37</td><td>1.75</td><td>2.65</td><td>2.01</td></tr><tr><td>Incremental GLC's as per EC of sponge iron plant, pellet plant</td><td>0.02</td><td>0.01</td><td>-</td><td>0.01</td></tr><tr><td>Overall Scenario (Worst Case)</td><td>71.29</td><td>46.09</td><td>13.67</td><td>21.56</td></tr><tr><td>NAAQ Standard 2009</td><td>100</td><td>60</td><td>80</td><td>80</td></tr></table>			Particulars	(PM ₁₀)	(PM _{2.5})	(SO ₂)	(NO _x)	Baseline Scenario (Max)	69.90	44.33	11.02	19.54	Predicted GLC (Max) (Area Source by Belkundi Iron and Mn Ore Mine)	1.37	1.75	2.65	2.01	Incremental GLC's as per EC of sponge iron plant, pellet plant	0.02	0.01	-	0.01	Overall Scenario (Worst Case)	71.29	46.09	13.67	21.56	NAAQ Standard 2009	100	60	80	80
Particulars	(PM ₁₀)	(PM _{2.5})	(SO ₂)	(NO _x)																												
Baseline Scenario (Max)	69.90	44.33	11.02	19.54																												
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Overall Scenario (Worst Case)	71.29	46.09	13.67	21.56																												
NAAQ Standard 2009	100	60	80	80																												

S. No.	ADS Point	Reply/ Response of PP
	Additional Environmental Management Measures Proposed by M/s Rungta Mines Limited are as below: Fugitive emissions will be controlled by keeping raw materials DRI & Scrap as well as finished products under covered sheds. There will be increase in traffic by approximately 28 trucks. The total solid waste generation will increase in form of slag (by 2859 TPA), mill scale (by 228 TPA) and BF dust (by 489 TPA). Slag and mill scale shall be 100% reutilized while BF dust shall be stored in designated solid waste area. Additional environmental management measures proposed are: ✓ Installation of the latest & state-of-the art bag filters compliant to 30 mg/Nm³ ✓ Solar lighting for all streets and parking area. ✓ Solar panels of roof top to minimize power consumption from own power plant at Karakolha (0.5 km away). This will reduce coal consumption in own CPP ✓ 1 ha green belt plantation outside project boundary	
13	PP needs to submit the authenticated list of flora and fauna as per the Wildlife (Protection) Amendment Act, 2022.	Certification dated 15.05.2025 from the Office of The Divisional Forest Officer, Keonjhar Division of State Forest Department certifying the list of flora and fauna prepared as per the Wildlife (Protection) Act 1972 and Amendment Act, 2022 is furnished. Copy enclosed as Annexure-XV of updated ADS reply sent vide mail on 12.06.2026.
14	PP needs to submit the copy of the approved wildlife conservation plan as per the Wildlife (Protection) Amendment Act, 2022.	Certification dated 15.05.2025 from the Office of The Divisional Forest Officer, Keonjhar Division of State Forest Department certifying that approved wildlife conservation plan prepared as per the Wildlife (Protection) Act 1972 and Amendment Act, 2022 is furnished. Copy enclosed as Annexure-XVI of updated ADS reply sent vide mail on 12.06.2026.
15	PP must clarify about the portions of ML area that appear lying in the Jharkhand State, as per KML file submitted by them.	It is respectfully submitted that as per the Lease Documents, the Mine Lease area for Belkundi Iron and Manganese Ore mine falls within the boundaries of Odisha State. In this regard following are furnished: • DGPS Survey Boundary Map of the Mine Lease, duly superimposed on the SOI Toposheet no. 73F/8, is enclosed as Annexure-XVI A of updated ADS reply sent vide mail on 12.06.2026. • DGPS Survey Boundary Map of the Mine Lease, duly superimposed on the Khasra Map Prepared by ORSAC, Govt. of Odisha and authenticated by Revenue, Forest and

S. No.	ADS Point	Reply/ Response of PP
		Mining Departments of Govt. of Odisha is enclosed as Annexure-XVI B of updated ADS reply sent vide mail on 12.06.2026. • Mining Lease Plan executed by District Magistrate/ Collector, Keonjhar district, Odisha. Copy is enclosed as Annexure-XVI C of updated ADS reply sent vide mail on 12.06.2026.

ADS-3: The proponent submitted the ADS reply vide letter dated 29.05.2026 against ADS raised on 26.05.2025. Point-wise reply of ADS is given as below

S. No.	ADS Point	Reply/ Response of PP
1	PP needs to take note of the MoEFCC O.M. dated 20.01.2026.	MoEF & CC (IA Division) Office Memorandum dated 20.01.2026 clause no. 11(b) reads inter-alia "All violation cases pending under S.O.804 dated 14.03.2017 shall be processed but the final order granting approval shall not be issued till further orders of the Hon'ble Supreme Court

ADS-4. The proponent submitted the ADS reply vide letter dated 14.07.2026 against ADS raised in 8th EAC meeting dated 29-30 June 2026 uploaded on PARIVESH on 10.07.2026. Point-wise reply of ADS is given as below

S. No.	ADS Point	Reply/ Response of PP
1	PP shall undertake a comprehensive review of the proposal and submit revised responses addressing all project-specific aspects, including statutory compliances, KML layers, lease boundary details, land use features, associated infrastructure within the lease area, environmental safeguards, and all replies furnished against the earliest ADS points.	The revised responses have been updated in the kml file w.r.t. Statutory compliances, KML layers, lease boundary details, land use features, associated infrastructure within the lease area and Environmental safeguards. The updated kml file is submitted on parivesh web portal.
2	PP shall ensure that the newly appointed consultant is fully conversant with all technical, environmental, statutory, and regulatory aspects of the proposal. The consultant, along with the Project Proponent, shall appear before the EAC in the next meeting	It is assured that newly appointed consultant is prepared to present the case in the upcoming EAC meeting.

	with complete preparedness and be in a position to satisfactorily explain all project details and respond to the Committee's queries.	
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xxv. Written submissions

Proponent submitted the following during the EAC meeting:

PP has submitted the following vide email dated 20.07.2026

Sl No.	Query Raised	Reply						
1	Revised budget for PH <u>Action plan as per MoEF & CC O.M. dated 30.09.2020</u>	<u>Action plan as per MoEF & CC O.M. dated 30.09.2020</u>						
		S. No.	Issues Raised/Activity	Physical Target Tangible and Monitor able Action Plan	Physical target with budget in			Total Expenditure (Rs. in Lakh)
		1.0			1 st year	2 nd Year	3 rd year	
		i	Measure s for protection of Forest & Environ ment during mining activities	Construction of 6 no's Check dams at Dalki Nala passing through Belkundi, Dalki, Nalda to arrest silt arrest silt.	Belkundi Village 2nos: 6.00	Dalki Village 2nos: 6.00	Nalda Village 2nos: 6.00	51.00
		Awareness's creation at nearby villages through Organization camps, Training Programmes for environment and Forest protection on quarterly basis at each villages(Thak		6.00	6.00	6.00		

Sl No.	Query Raised	Reply					
				urani, Barbil, Shanta bahal)			
				Construction of Plastic Waste and Solid waste Handling Facility at Thakurani, Barbil, Shanta bahal	Thakurani village 5.00	Barbil 5.00	Shanta Bahal 5.00
		ii	Identification of specific Transportation Route & Dust control in this Routes particularly passing through Habitation areas	Stone pitching at road side from mine pit boundary to nearest siding/ Village / District Road Junction, progressively at Karakhola, Nalda and Karakhandra) 4.5 km	Karakhola 1.0 km 10.00	Nalda 1.0 km 10.00	Karakhandra 2.5 km 25.00
				Deployment of Water sprinklers/ spray on regular roads used in transportation (at least @ 03 trips per day from mine pit boundary to nearest siding / Village/ District Road Junction)	Karakhola, Nalda, Karakhandra 5km 7.00	Karakhola, Nalda, Karakhandra 5km 7.00	Karakhola, Nalda, Karakhandra 5km 7.00
		iii	Measures to prevent	Regular Monitoring of Environmenta	6.00	6.00	6.00
							81.00

Sl No.	Query Raised	Reply					
			health hazards in Barbil areas due to air and water pollution	1 parameters on quarterly basis at core zone and villages Nalda, Karakhendra, Belkundi, Karakolha, Uliburu, Barbil-7 & Barbil-8.			
				Regular monitoring of health conditions (bi-annual medical camps & expected beneficiary 500 people)	5.00	5.00	5.00
				Distribution of Community RO Units to villages Karakhendra, Karakolha, Thakurani (02 numbers/year)	Karakhendra 2nos 16.00	Karakolha 2 nos 16.00	Thakurani 2 nos 16.00
		iv	Protection of Agricultural Lands of Belkundi, Karakhendra, Karakolha & from Runoff discharge	To arrest rainwater discharge from Belkundi Mines additionally, construction of Garland Drains (02 numbers) with size 15m	10.0	Nil	Nil
							10.00

Sl No.	Query Raised	Reply						
			e from mines &.	X 1.0m X 1.0m Gully Plugs/ Check Dams (02 numbers) with 3.0 m wide Settling Ponds (04 numbers) with 20.0sqm. each				
		v	Restoration of Thakurani Nallah by digging up Belkundi which get dried up due to wastes dumps.	Restoration of Thakurani Nallah by scientific measures like Desilting (150 m X 50 m), Pitching and green turfing of banks (500 m length), Berms on the banks construction of retaining wall/ gully plugs/check dams wherever required	5.0	Nil	Nil	5.00
		vi	Rejuvenation of Karo River to maintain natural flow & plantation along 5 Km	Rejuvenation of nallah feeding the Karo River, in regular stretches of 1.0 to 1.5 km per year.	Provide Safety Zone of 50.0m width on	Construction of Retaining wall, Garland drains 5.00	Nil	10.00

Sl No.	Query Raised	Reply					
		stretch to increase flow in River	Protection of the Nallah passing across the ML extent with Provide Safety Zone of 50.0m width on either side, Construction of retaining wall with garland drain along the length of the nallah outside the Safety Zone on either side of the nallah 02 nos. (2.0m X 2.0m) wherever necessary / on hilly terrains. Construction of gully plugs/check dams wherever required	either side 5.00			
		1.0 Sub-Total (Environmental issues)					223.00
		2.0 Peripheral Issues /Activity	Physical Target	Physical Target /Tangible and Monitorable Action Plan			Total Budget (Rs. in Lakh)
		2 Employment		1 st year	2 nd year	3 rd Year	

Sl No.	Query Raised	Reply						
		i	Priority for locals/ directly affected people/ hatting youths in employment based on qualification	Skill development training will be provided for the locals i.e. tailoring, farming SHG schemes etc to increase employability and earning capacity of nearby villagers of Belkundi, Thakurani, Dalki .	Belkundi 10.00	Thakurani 10.00	Dalki 10.00	30.00
		ii	Deployment of local vehicles & engagement of local drivers for mining activities	Priority will be given to local vehicles & engagement of local Petty Contractors in construction works & other Mining activities 50 % vehicle /drivers shall be engaged				

Sl N o.	Query Raised	Reply					
				from Local area			
		iii	Engagement of local Petty contractors in construction works & other mining activities	Priority will be given to the engagement of local Petty Contractors in construction works & other mining activities. It is estimated 40 nos of laborers shall be engaged for such work and 90 % of laborers shall be engaged from Local area.			
		2.0 Sub-Total					30.00
		30	Adoption of manual mining instead of mechanized mining	PP has proposed to restart production of Mn ore from Belkundi Iron & Mn ore mines by open cast			

Sl No.	Query Raised	Reply						
				mechanized mining methods such as drilling blasting, loading, stacking, dumping & transportation. However, following tasks will be carried out manually such as ore segregation sorting picking sizing surveying plantation, transportation housekeeping wards and watching etc. Total 20 person per day shall be engaged from Local area				
		i	Provision of Skill Development Program &	Assistance for Skill development	3.00	3.00	3.00	9.00

Sl No.	Query Raised	Reply					
			Technical Training to Local Youths for better employment opportunities	program & arrangement of technical training to local Youths for better employment opportunities			
		ii	Development of Education facilities in the Nalda area	Repairing and renovation facilities will be provided to the nearby Government schools at villages Nalda, Karakohla and Dalki.	Nalda School 3.00	Karakohla School 3.00	Dalki School 3.00 9.00
		3.0 Sub-total					18.00
		40	Electricity facilities to each Houses of local villages	Common electricity Infrastructure shall be provided for villagers of Dalki, Belkundi, Thakurani same shall be maintained	Belkundi 10.00	Dalki 5.00	Thakurani 5.00 20.00

Sl N o.	Query Raised	Reply						
				d regularly				
		4.0 Sub-total						20.00
		5 . 0	Health Care					
		i	Development of Health facilities for locals	Ambulan ce has been provided for local villagers and deployed at Hospital of OMDC exist at Thakuran i, Barbil. The Hospital will be upgraded to accommo date Barbil and nearby villages.	2.00	2.00	2.00	6.00
		ii	Opening Hospital Barbil	of at Infrastruc tural developm ent shall be done at Hospital present at Badbil.	5.00	5.00	5.00	15.00

Sl No.	Query Raised	Reply							
		iii	Steps to prevent Dengue	Awareness camp shall be arranged at nearby villages for prevention and treatment for Dengue Karakhen dra, Karkohla, Shantabahal	Karakhendra 1.00	Karkohla, 1.00	Shantabahal 1.00	3.00	
		5.0 Sub-Total							24.00
		60	Drinking water supply to each house of Local villages to avoid Iron Water Issues	Common water supply infrastructure shall be provided at nearby villages. Beneficiary: One Cluster of 50 households/ year. Population of villages of Uliburu, Barbil-7, Barbil-8	Uliburu 7.00	Barbil-7 7.00	Barbil-8 7.00	21.00	
		6.0 Sub-Total							21.00
		70	Other Developmental work						

Sl No.	Query Raised	Reply						
		i	Ensure Socio-economic Developments of Local people	In consultation with BDO, Tahsildar Village Sarpanch measure will be undertaken for socio-economic developments at Soyabali, Dalki, Thakurani	Soybali 10.00	Dalki 5.00	Thakurani 5.00	20.00
		ii	Establishment of right communication facilities with locals through dedicated personnel	Each activity shall be carried out with consultation with BDO, Tahsildar, Sarpanch . Local interaction cell shall be established at mine headed by mines manager and welfare officer from OMDC as regular member.	2.00	2.00	2.00	6.00

Sl No.	Query Raised	Reply						
				Two local persons shall be nominated by sarpanch shall be the member with meeting at quarterly basis to address the issues.				
		iii	Steps to control accidents	Implementation of DGMS guidelines Speed restriction at 20KMPH while crossing the habitation Awareness, Sign board & safety campaign, training & re-training of mine employees etc.	3.00	2.00	2.00	7.00

Sl N o.	Query Raised	Reply					
		7.0 Sub-Total					33.00
		Total					369.00
2	Revised budget for EMP	Sl N o	Parameters	Source/Activity	Mitigation Measures	Budget (Rs. Lakhs)	
						Capital Cost	Recurring Cost per annum
		1	Air Pollution	Land Development	Minimize clearing and Restoration of Topsoil	10.0	4.2
				Drilling and Blasting	• Water Sprinkling • Blast during off-peak hours • Controlled blasting • Use of Water drilling machine fitted with water injector system	30.0	4.0
				Excavation	• Construct retaining walls, Garland Drain, Settling pit	20.0	1.5
				Transportation	• To cover trucks with Tarpaulin • Maintain Vehicles regularly	25.0	2.5

Sl N o.	Query Raised	Reply						
					• Design proper haul roads • Wheel Washing system			
			1.Sub-total (Air Pollution)				85.0	12.2
		2	Water Pollution	Contamination of Ground water and Surface water due to Mining Activity	• No Ground water intersection • STP installation and operation • Surface Runoff management system • ETP for Mechanical service center • Maintenance of Rainwater harvesting structures in and around mine, re-charge pond	25.0	15.0	
		3	Land Degradation	Land degradation due to Excavation	Grass turfing, coir matting at strategic areas, Plantation maintenance	5.0	6.0	
		4	Noise Pollution	Noise generation due to movement of Heavy machineries,	Provision of PPEs Regular maintenance of	3.0	1.75	

Sl No.	Query Raised	Reply					
				transport vehicle	Machineries Awareness creation among employees		
		5	Pollution due to Waste generating Mine (Solid wastes, E-Waste, Hazardous Waste, Plastic Waste)	OB generation due to Mining Used Oil /waste lubricant generation at Mechanical workshop E-waste, Plastic waste generation at Admin Building	Dumping as per approved mining Plan Management of Hazardous waste, E-waste, Plastic waste and other waste as per CPCB rule Regular training and awareness creation among employees	15.0	2.0
		6	Pollution Measurement	Environmental Monitoring for the parameters viz air, water, noise	Establish a comprehensive monitoring system for air, water, and soil quality; conduct regular audits and report findings - Three No's of CAAQMS (Continuous Ambient Air Quality Monitoring Station)	- 150.0	- 15.0

Sl No.	Query Raised	Reply				
				Third Party Ambient Air Quality Monitoring	-	30.0
				Soil Quality	-	1.0
				Water Quality	-	2.0
				Noise	-	1.0
				Health Check up	-	5.0
		6. Sub-Total (Pollution Measurement)			150.0	54.00
	7	Awareness	Environmental Awareness, Implementation of ISO 14001, Awareness among Local villagers Provision of Solar lights to villagers	Training and awareness to Employees	3.0	19.00
		Grand Total (1+2+3+4+5+6+7)			286.0	109.95

Signature Not Verified

Digitally Signed by : Sundar Ramanathan
Member Secretary, MoEFCC (EC)

Date: 12/08/2026