File No.:8-28/2015FC
Government of India
Ministry of Environment, Forest and Climate Change
(Forest Conservation Division)

Indira Paryavaran Bhawan,
Aliganj, Jor Bag Road,
New Delhi - 110003.
Dated: As per e-sign

To

The Addl. Chief Secretary (Forests),
Government of Odisha,
Bhubaneswar

Sub: Proposal for non-forestry use of balance forest land of 746.3325 ha including 11.8305 ha for safety zone (excluding 95.60 ha of pre-1980 broken up forest land already diverted and 4.467 ha of forest land being proposed for diversion in separate proposal for mining infrastructure of Daitari ML) within total forest land of 846.3995 ha located within approved Mining lease area of 1018.3085 ha for Iron Ore Mining in Daitari Mining lease in Cuttack Forest Division of Jajpur District and Keonjhar (WL) Division of Keonjhar District, Odisha) M/s OMC Ltd. during Mining lease period as extended under the amended provision MMDR Act - reg.

Madam/Sir,

I am directed to refer to the State Government of Odisha's letterNo. FE-DIV-FLD-0104-2021-319114/FE&CC dated 25.10.2025 on the above subject requesting to provide copy of the concerns raised by the NTCA related todiversion of balance forest land of 746.3325 haforest land for Iron Ore Mining in Daitari Mining lease and those raised in the report of the sub-committee which inspected the area.

In this regard, please find enclosed herewith the copy of report of NTCA and the report of the Sub-Committee for your kind information and necessary action.

Encl: As above

Digitally signed by
Suneet Bhardwaj
Date: 15-12-2025
22:25:11

Yours faithfully,

Sd/-
(Suneet Bhardwaj)
Assistant Inspector General of Forests

Copy to:

i. The PCCF (HoFF), Department of Forests, Government of Odisha, Bhubaneswar.

ii. The Dy. DGF (Central), Regional Office of the MoEF&CC at Bhubaneswar.
iii. The Nodal Officer (FCA), Department of Forests, Government of Odisha, Bhubaneswar.
iv. User Agency
v. The Monitoring Cell, FC Division, MoEF&CC, New Delhi for uploading on PARIVESH portal.

Assessment of Proposal for non-forestry use of balance forest land of 746.3325 ha including 11.8305 ha for safety zone (excluding 95.60 ha of pre-1980 broken up forest land already diverted and 4.467 ha of forest land being proposed for diversion in separate proposal for mining infrastructure of Daitari ML) within total forest land of 846.3995 ha located within approved Mining lease area of 1018.3085 ha for Iron Ore Mining in Daitari Mining lease in Cuttack.

The Daitari Iron Ore Mine, as observed in Google imagery (Fig. 1), is currently operational in this region. The proposed expansion seeks to extend mining activities into a forest patch that forms a critical segment of the least-cost corridor connecting the Simlipal and Satkosia Tiger Reserves (Fig. 2). The parallel lines depicted in Figures 2 and 4 represent the indicative least-cost pathway and is located in the closest patch within the circuit-scape corridor habitat **(Fig 2)** highlight the importance of the surrounding forest in maintaining the corridor's ecological integrity. it. This forest patch plays a pivotal role in facilitating wildlife movement and ensuring the functional continuity of the corridor.

The proposed mining site is situated within the connecting forests that serve as a natural linkage between Simlipal and Satkosia, as evidenced by elephant presence reported in the All India Tiger Estimation exercises (Fig. 3). Both Simlipal and Satkosia Tiger Reserves have depressed tiger densities and are home to a genetically unique lineage of tigers, making the conservation of this corridor essential for the long-term survival and recovery of these populations. Development activities, such as mining and associated human interventions like increased bio-resource extraction and transportation, are likely to disrupt the corridor's functionality, potentially leading to habitat fragmentation, reduced connectivity, and heightened human-wildlife conflict.

Currently, this corridor is actively used by elephants for movement between protected areas. Its preservation is vital not only for maintaining elephant populations but also for facilitating tiger dispersal and eventual population recovery. In the future, once tiger populations in Simlipal and Satkosia are restored, this corridor is expected to become an important component of the least-cost tiger pathway. Furthermore, the corridor's ecological significance extends beyond Simlipal and Satkosia. The forest connectivity stretches southward to the Chandaka Wildlife Sanctuary (WLS) and Athgarh WLS via the Dhenkanal Forest Division. This broader network acts as a critical conduit for wildlife movement, enabling gene flow and ensuring the resilience of regional wildlife populations. It also serves as a stepping stone for tigers, providing essential habitats for their dispersal across landscapes.

Considering these ecological and conservation concerns, the proposed expansion of the Daitari Iron Ore Mine into this forested corridor is **not recommended.** Such activities may undermine the region's ecological integrity and compromise its role as a vital link for wildlife movement and biodiversity conservation in eastern India.

Figure 1 Google imagery of Daitari Mining site

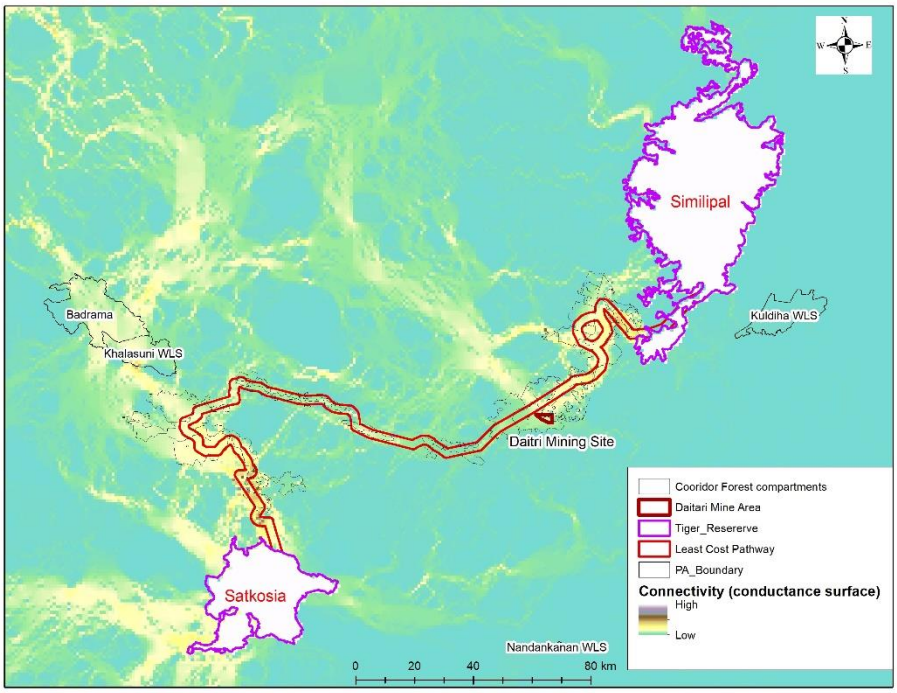

Figure 2 Circuitscape corridor (Daitari mine area is in moderate corridor habitat) & Forest compartment of Corridor

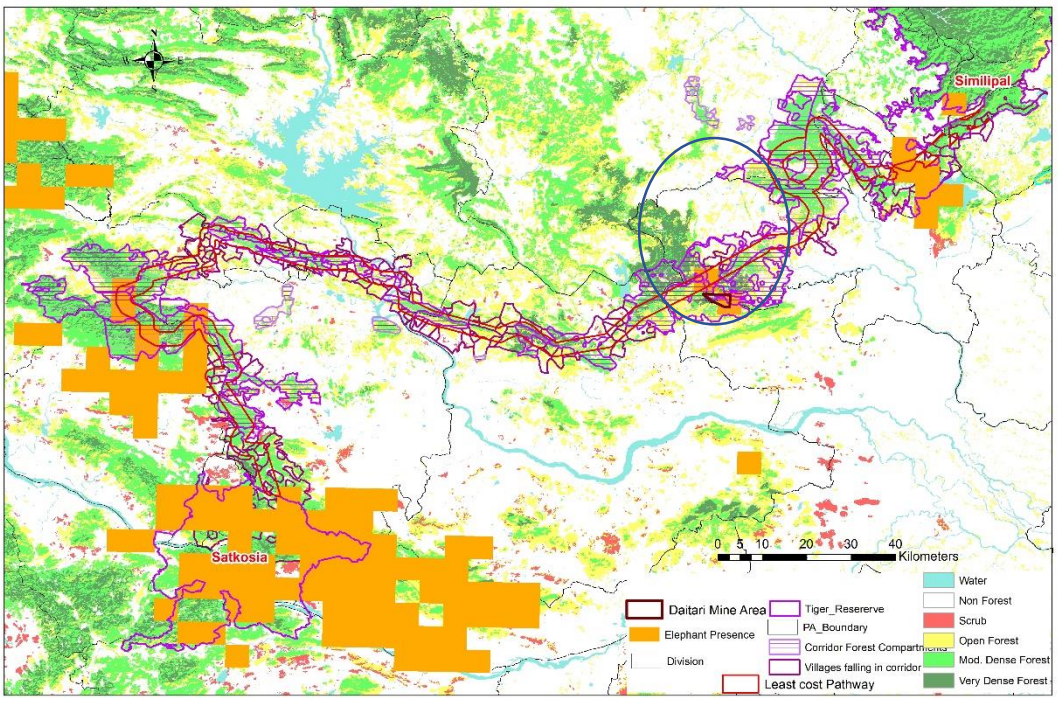

Figure 3 Elephant Presence within the proposed mining area and forest compartments adjoining indicative least cost pathway

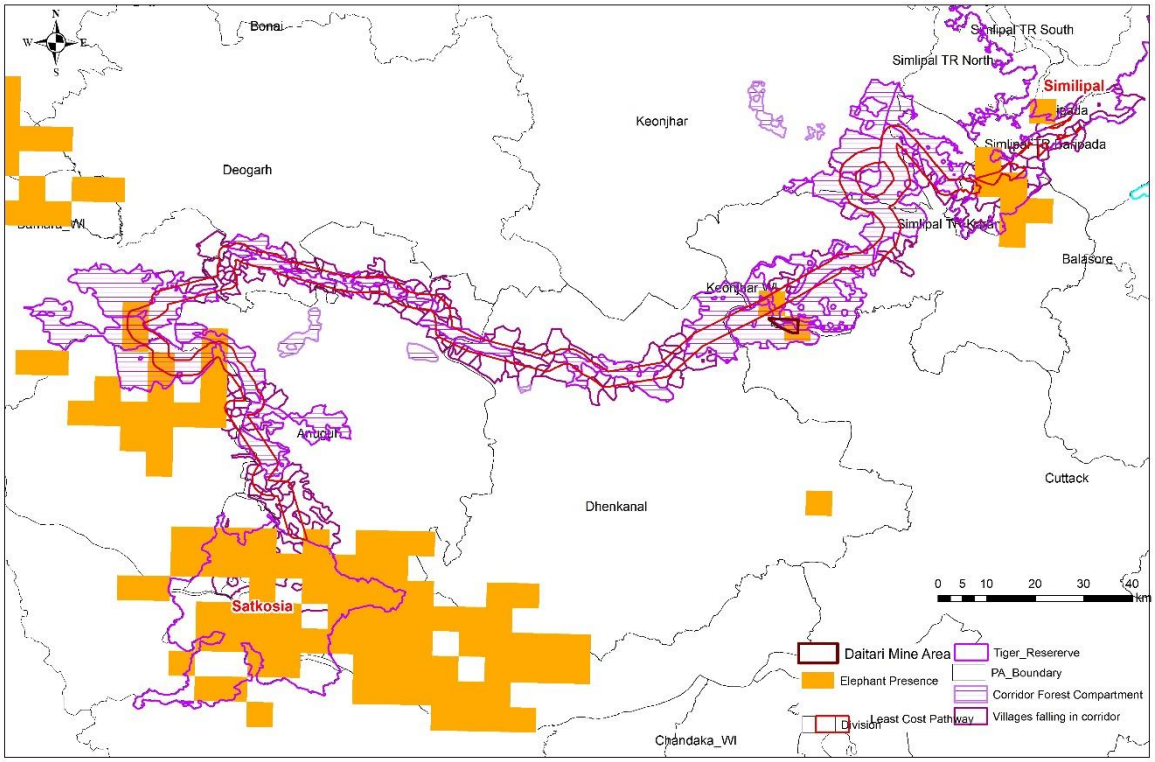

Figure 4 Forest compartments within the Daitari lease area & Elephant presence (map without Forest cover for clarity)

भारत सरकार / Government of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय / Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय, भुवनेश्वर / Regional Office, Bhubaneswar
ए ३, चंद्रशेखरपुर / A/3, Chandrasekharpur
भुवनेश्वर - ७५१ ०२३ / Bhubaneswar - 751 023
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No.5-ORA263/2015-BHU

15th February, 2024

To

The Addl. Director General of Forests (FC),
Ministry of Environment, Forest & Climate Change,
Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj,
New Delhi – 110 003.

Sub: Diversion of balance forest land of 746.3325 ha including 1.8305 ha for safet zone (excluding 95.60 ha Pre-1980 broken up forest land already diverted and 4.467 ha of forest land being proposed for diversion in separate proposal mining infrastructure of Daitari ML) within total forest of 846.3995 ha located within approved Mining Lease area of 1018.3085 ha for Iron Ore Mining in Daitari Mining Lease in Cuttack Forest Division of Jajpur District and Keonjhar (WL) Division of Keonjhar District, Odisha of OMC Ltd. during Mining Lease period as extended under the Amendment provision MMDR Act – Submission of final Study Report regarding.

Ref: Ministry's OM No.8-28/2015-FC dated 10.05.2023.

Sir,

With subject and reference cited above, I am to inform that as per Ministry's OM dated 10.05.2023, the Sub-Committee had carried out inspection of the area proposed forest land for diversion on 8th and 9th August, 2023. The inspection report of the Sub-Committee is forwarded herewith for kind information and necessary action.

Yours faithfully,

Encl: As above.

20/2/24

(A.T. Mishra)
Dy. Director General of Forests (C)

Inspection report of Sub-Committee of Forest Advisory Committee (FAC) of Ministry of Environment, Forest & Climate Change (MOEF&CC) regarding diversion of forest land for iron ore miningin Daitari mining lease in Cuttack Forest Division of Jajpur District and Keonjhar (WL) Division of the Keonjhar District.

In pursuance of Ministry of Environment, Forest & Climate Change (MOEF&CC)'s OM dated 10th May 2023 regarding constitution of a sub Committee for inspection of Daitari mining lease in Jajpur and Keonjhar Districts of Odisha, the Sub-Committee thus constituted carried out detailed inspection of the area proposed for diversion of forest land on 8th and 9th of August 2023. Officials of Odisha Forest department, field staff of Forest and Wildlife Department and representatives ofOdisha Mining Corporation (OMC) also accompanied the Sub-Committee during the inspection.

Detailed discussions were held with the officials of Odisha Forest Department, field staff of Forest and Wildlife Department and representatives of OMC before, during and after inspection. Inspection was carried out in pursuance to the decision taken during FAC committee meeting held on 25-04-2023, the minutes of which werecirculated vide Ministry of Environment, Forest & Climate Change (MOEF&CC)'s OM No. 11-91/2012-FC.

The background of the case is as under:

Background

(A) Daitari iron ore mining lease was granted over an area of 1812.99 ha. in Jajpur and Keonjhar Districts of Odisha on 16.03.1965 by the erstwhile Mining and Geology Department of Odisha and was executed on 27.03.1966 for a period of 30 years in favour of Odisha Mining Corporation (OMC). The original lease period expired on 26.01.1996. The surface rights were granted to OMC Ltd. by Collector, Cuttack vide letter dated 17.11.1966. First renewal was done on 27.01.1996 up to 26.01.2016 which was extended up to 21.03.2020 under the amended provision of MMDR Act. The Odisha Mining Corporation (OMC) continued operation and submitted proposal for diversion of 190.20 ha of forest land on 10.07.1997, out of which MOEF&CC conveyed approval of 95.60 ha of broken up forest area only vide F. No.8- 164/1997-FC dated 27.01.2005. MOEF vide letter F. No. 8-164/1997-FC dated 27.01.2005 accorded final forest clearance for diversion of 95.60 ha which was consisting of 59.254 ha. in Rebana RF in Keonjhar (WL) Division of Keonjhar district and 36.346 ha of Daitari PF of Cuttack Division of Jajpur district. In order to justify keeping the balance area, OMC signed an MoU with Geological Survey of India (GSI), Eastern Zone, Bhubaneswar during 2010-11with an objective to demarcate iron ore bearing and non-ore bearing zones of Daitari ML area over the area of ML 1812.99 ha. Based on the report submitted by GSI, OMC decided to surrender 794.6815 ha of area and retained 1018.3085 ha from the Mining Lease area. Directorate of Mines, Odisha issued the revised area plan for retained area of 1018.3085 ha. on 23.02.2013.

(B) The status of land in Daitari Mining Lease is as under

Particulars		Area in Ha.		Remarks
Original Mining Lease area -1812.99 ha.				
Mining Lease area surrendered and accepted by State Govt. on 07.09.2012		794.6815 ha.	Virgin forest land in Daitari PF	
Present Mining Lease area -1018.3085 ha. (Forest-846.3995 ha. +Non-forest-171.9090 ha.)				
Keonjhar district (788.6959 ha.)	ReserveForest	563.0789 ha	Rebana RF	616.7869 ha.
	Village Forest	53.708 ha.	Talapada	
	Non-Forestland	171.909 ha.	Govt.- 171.637 ha Tenanted - 0.272 ha.	171.909 ha. non forest land
Jajpur District (229.6126 ha.)	Daitari PF	229.6126 ha.	-	229.6126 ha. forest land
Diversion proposal submitted by: Odisha Mining Corporation (OMC)		746.3325 ha. (846.3995 ha.- 95.60 ha.- 4.467 ha.)		

The Govt. of Odisha, Department of Environment, Forest and Climate Change vide letter dated 19-09-2015 submitted proposal for obtaining prior approval of the Central Government for diversion of balanced forest land of 746.3325 ha including 11.8305 ha. for safety zone within total forest land of 846.3995 ha, located within approved mining lease area of 1018.3085 ha for iron ore mining in Daitary mining lease, in Jajpur and Keonjhar districts of Odisha in favour of Odisha Mining Corporation (OMC) during mining lease period as extended under the amended provision of MMDR Act.

Thus the total lease area of the project is 1018.3085 ha. Out of which forest area is 846.3995 ha. Out of 846.3995 ha. of forest land, diversion is sought for 746.3325 ha and 95.60 ha has already been diverted in 2005. Remaining
4 ha is included in another proposal which is in the process of submission fordiversion.

(C) The area applied for diversion does not involve any notified Eco-sensitive Zone/National Park/sanctuary. However, this area was supporting Royal Bengal Tigers in the distant past. Recently, National Tiger ConservationAuthority (NTCA) has proposed a tiger corridor interlinking Similipal Tiger & Satkosia Tiger Reserve in Odisha, which is essential for long term Tiger/Wildlife conservation in our country. Field verification of the proposed corridor is going on. The area proposed for forest diversion comes within the proposed tiger corridor.

(D) Environment clearance has already been obtained by the user agency vide Ministry's letter No.J-11015/1003/2007-IA.II(M) dated 22.09.2010 of MOEF, Govt. of India.

(E) It is reported by the State that within Keonjhar (WL) Division 1,65,869 number of trees are assessed to be existing over the forest land proposed to be used in this mining project. In over 193.2666 Ha of forest land of this lease coming within Cuttack Division 70,697 number of trees are assessed to be existing over the forest land proposed to be used in this mining project. As there are a large number of trees to be felled, it may adversely affect the general eco-system in the area.

(F) The user agency had filed a forest diversion proposal for 95.60 ha of pre-1980broken up forest land only thereby excluding 94.60 ha of forest land which is prohibited and protected for safety zone.

(G) The proposal was considered in meeting of Forest Advisory Committee (FAC) held on 12.07.2016 and FAC observed that:

a. It has been reported by the DFO, Keonjhar (WL) Division and RCCF, Rourkela, that the area was supporting Royal Bengal Tigers in the past. The last confirmed presence of tigers in this area was in the year 1997. National Tiger Conservation Authority has proposed a Tiger Corridor intelinking Similipal Tiger Reserve and Satkosia Tiger Reserve in Odisha for long term Tiger/Wildlife conservation in the country. Field verification of the proposed corridor is going on. The area proposed for forest diversion for this infrastructure project comes within the proposed Tiger corridor. The same shall be examined by National Tiger Conservation Authority in view of section 38(G) of Wildlife Protection Act, 1972 and their views will be provided to FAC for consideration.

b. Upon examination of the proposal under Decision Support System of the MOEF&CC, it is evident that the area falls in the proposed *inviolate* category as per the draft criteria of MOEF&CC for classifying forest area as *inviolate*. The shape files of the proposed area shall be provided to FSI Dehradun so that the status of the forest land can be reconfirmed in accordance with the draft criteria for classifying forest areas as *inviolate*.

c. Comments of IA Division of MOEF&CC may be sought regarding applicability of NEERI report.

(H) Recommendations of NTCA:

a. The proposed mining should be limited to the iron ore bearing area as per the geological map with different ore bearing areas that has been provided.

b. No human settlement or colony will be allowed in the forest area of proposed extension.

(I) FAC in its subsequent meeting held on 20.07.2017, after thorough deliberations and discussion with the user agency, the representatives of the State Government and Regional Office observed that the forest area is of pristine nature which has more than 2,72,535 trees with density about 0.8 and National Tiger Conservation Authority (NTCA) has proposed a tiger corridor interlinking Similipal Tiger & Satkosia Tiger Reserve in Odisha which is essential for long term Tiger/Wildlife conservation in our country.

(J) The above information was placed before the FAC meeting held on 26.07.2018. The Committee inter alia recommended that : "The FAC after through deliberation and discussion with the representative of APCCF Regional Office Bhubaneswar and user agency observed that the said diversion proposal is situated, in a virgin, very dense, nearly undisturbedpristine forest having immense biodiversity value and is serving as a crucial tiger corridor interlinking Similipal Tiger Reserve and Satakosia Tiger Reserve, which is very near to the proposed diversion boundary and is a prized habitat, of elephants and many species of very important wildlife which is of grave concern and utmost importance. It was also observed that the said OMC mine (currently operating in 95.60ha) is a lone mine situated on hill top and is aerially 5 km (approx.) apart/away from the Chromite mine cluster which are situated in the valley.

Besides it is proposed to fell 2.7 lakh trees in a pristine forest. It is also informed that the best iron ore of the country is available under these pristine forests. It is not prudent to go for mining in such a pristine forests without having full knowledge of the mineable reserve under already opened up area. Taking all these factors into consideration, FAC recommended that MOEF&CC may conduct a study through ICFRE, which may take help of IBM (Indian Bureau of Mines), to ascertain the technical feasibility of the fact that how much quantity of ore material can be extracted from already opened up areas without further expansion of the existing mining area (i.e. 95.60 ha). The study may also indicate the time duration for which the extraction of material can be done from already opened area. ICFRE study shall also have specific recommendations regarding environmental stability in the area if expansion of mining activity is allowed beyond already broken up area. The recommendation of study shall clearly come with comparative statement of environmental loss vis a vis benefit (comparison in monetary terms including both tangible and intangible benefits/loss) which will be accrued/lost if the area is allowed for mining. Study may also explore the possibility of specific technological interventions for ore extraction without disturbing the green cover of the area.

(K) The FAC recommended to MOEF&CC to conduct a study "*To assess mineable reserve, duration for the extraction of iron ore from already opened up area, environmental stability, comparative statement of environmental loss and benefit accrued and possible technological intervention without disturbing the green cover in Daitari Iron ore Mine lease of OMC Ltd.*" through Indian Council of Forestry Research and Education (ICFRE).

(L) Accordingly, MOEF&CC vide letter P. No.8-28/2015-FC dated 28th September, 2018 requested ICFRE to conduct the study.

(M) ICFRE, Dehradun after detailed study as per the observations of FAC submitted the final report, Vol. I & II and Executive Summary on carrying Capacity and Biodiversity Assessment Study Report of Daitari iron ore mine ofOdisha Mining Corporation Ltd., Odisha in association with Wildlife Institute of India (WII), Dehradun pertaining to the above diversion proposal vide letter dated 08.12.2022.

(N) The ICFRE report, in order to maintain/ preserve the vegetation and biodiversity of the proposed area suggested modifications in the configurations of the mining interventions contributing to reduction in an area of 309.66 ha from the applied area by M/s OMCL (i.e. 746.33 ha) and recommended to preserve an area of 613.05 ha intact within DIOM lease comprising of very dense forest (367.98 ha.) moderate forest (87.85ha) and open forest (129.01 ha) that fall both in Keonjhar Wildlife Division and Cuttack Forest Division as well as non-forest area (28.21 ha) within the total DIOM mining lease area.

(O) The Mining Lease Area (MLA) and its buffer zone are very important in viewof its phytogeography and occurrence of Rare, Endangered and Threatened (RET) plant species. A total of 28 RET plant species were reported from the entire area i.e. both in core and buffer areas. The RET plants are having conservation importance and needs to be rehabilitated appropriately within their natural habitat prior to initiation of mining and its allied activities in the proposed area.

(P) The abundance and diversity of animal species is largely dependent on the availability of suitable habitats and characteristic vegetation cover on which they depend for their various biological needs. The approved site-specific Wildlife Conservation Plan for Daitari iron ore mine with a total financial outlay of Rs.2, 410.015 lakhs as on 16.08.2018 holistically deals with the measures required for conservation of wildlife in Keonjhar Wildlife Division and Cuttack Forest Division. In addition, following specific recommendations for appropriate implementation to achieve additional safeguards to enhance the habitats for wildlife forms were made.

(Q) General recommendations:

a. In order to encourage as well provide habitat for local birds that act asagents of some of the very important ecosystem provisioning services like seed dispersal, pollination, pest control, etc., suitable fruit bearing host trees such as Alangium, Salvifolium, Annona squamosa, Bombax ceiba, Cochlospermum religiosum, Erythrina suberosa, Ficus benghalensis, Ficus religiosa, Ficus racemosa, Maduca longifolia var. latifolia, Syzygium cumini, Ziziphus maurtiana, etc., is recommended to be planted in the disturbed areas where restoration is suggested through afforestation.

b. Sal and its associated trees being the predominant plant species in the entire forest area, mining activity, if allowed, is most likely to disturb the area covered under the tree species. In view of this, suitable conservation interventions including propagation of Sal and its associated tree species through various established methods have to be undertaken and planted within the mining lease as well as its buffer zone for regenerating the habitat lost on account of mining related disturbances in the forest landscape.

c. The multipurpose tree species, particularly of medicinal, food, commercially important, etc., as identified from the study area and listed in the report are recommended to be conserved together with its habitats through established methods. In order to minimize the impact of mining on the vegetation in buffer areas, it is important that adequate protection measures need to be followed that include assisted regeneration in the forest area and soil and water conservation measures.

(R) The ICFRE suggested modifications in the configurations of the mining interventions contributing to preserve an area of 613.05 intact within core area of the DIOM lease comprising of very dense forest (367.98 ha.) moderate forest (87.85 ha.) and open forest (129.01 ha) that fall both in Keonjhar Wildlife Division and Cuttack Forest Division as well as non-forest area (28.21 ha) within the total DIOM lease area.

Impact on the width of the proposed Similipal-Satkosia corridor:

The DIOM lease fall amid/within the proposed Similipal -Satkosia corridor, which is approximately 250 km long degraded and fragmented forest corridor connecting two potential habitats for Tigers (*Panthera tigiris*), Asian elephants (*Elephas maximus*) and other wildlife that connects the Similipal Tiger Reserve (TR) of Mayurbhanj district (21°35'35.22" N & 86^0 17' 40.34" E) with the Satkosia Tiger Reserve of Angul District (20° 30' 25.74" N & 84^0 51' 58.39 E) in the north-central part of Odisha (source Tiger Cell WII-NTCA, WII/T.CELL/ DEVPROJ/ ODISHA/2017) The corridor is formed by a chain of interconnected

beats of forests and wildlife divisions viz, Angul, Deogarh, and Athmallik in be west, Dhenkanal and Cuttack in the centre, and Keonjhar and Karanjia in the west. The western side of the corridor connects the Similipal Tiger reserve through the Satkosia and Thakurmunda range of the Karanjia Forest Division. In the east, the corridor connects Satokia Tiger Reserve through thePurunagarh range.

- Abundance of plants and mammals recorded highest in the vicinity of the Daitari iron ore mine (<2km). It could be related to the protection offered by the OMC and OSFD.
- The anthropogenic pressure around the Daitari iron ore mining lease (<5 km radius) is mainly due to livestock grazing, movement of human and treelopping

The ICFRE suggested area (309.66 ha) if considered for expansion by MoEF&CC for mining will contribute to preserve forest area of 475.79 ha in the core area of the ML that fall Brahmanipal range of Keonjhar Forest Division (comprises of very dense forest 334,29 ha moderate forest 68.31 ha; open forest 45.05 ha) will provide habitat connectivity within the Mining Lease area (MLA) in Koenjhar wildlife with the adjacent forest area. The proposed mining activity in the Hill Top and Sindurmundi deposit I & II will have impact on forest due to fragmentation, habitat availability and movement of mammals due to the reduction in corridor width due to mining. The current mining activities have already reduced the width of the corridor by approximately 3.42 km leaving 7 km of forest in the north and 2.7 km of forest in the south from the broken boundary towards Cuttack Forest Division in Tomka and Sukinda range. Extension of mining activities within the lease area will further reduce the width of the corridor by approximately 2.5 km, leaving 5.5 km to 6.6 km ofcorridor forest in the north Brahmanipal range of Keonglar Forest Division and 2 to

4.8 km in Tomka and Sukinda range of Cuttack Forest Division. The ICFRE suggested area have contributed to significant reduction in the forest required for mining and contribute to preserve forest in the core area and along the mine boundary in Cuttack Forest division. Overall, the ICFRE suggested configuration due to modifications in the interventions have contributed to preserve an area of 613.05 ha that comprises of very dense forest (367.98 ha) moderate forest (87.85 ha), open forest (129.01 ha) and non-forest area (28.21 ha) that fall both in Keonjhar and Cuttack Forest division.

Conservation area (Area in Ha.)				
Forest Class	Keonjhar WLDivision	Cuttack Forest Division		Total
	Brahmanipal Range	Tomka Range	Sukinda Range	
	Natur-III Beat	Kansa-A Beat	Tailangi Beat	
Non-Forest	28.14	0.06	0.00	28.21
Open Forest	45.05	24.37	59.59	129.01
ModerateForest	68.31	6.56	12.97	87.85
Very dense forest	334.29	9.06	24.64	367.98
Total	**475.79**	**40.05**	**97.2**	**613.05**
	Including non-forest 28.21 ha.			

ICFRE have suggested (Chapter 7 in section 7.3, 7.3.1) to maintain the forest (584.84 ha) and non-forest area (28.21 ha) of 613.05 ha to be preserve in the core area of ML that fall in Brahmanipal range of Keonjhar Wildlife Division intact to maintain the connectivity within Similipal - Satkosia corridor and continued ecological service. WII institute have observed abundance of plants and animals in less than 2 km. Therefore, the proposed habitat enrichment, afforestation in ELA/EMP and the site-specific wildlife management plan will

facilitate in habitat enrichment for mammals within Mining Lease area (MLA), which is part of the proposed Similipal - Satkosia corridor. In addition, the approved Site-Specific Wildlife Conservation Plan (SSWCP) with the financial outlay for 10 years (2410.015 lakhs, EIA/EMP 2020 pageno. 148) for implementation of various activities under the guidance of Keonjhar (WL)and DFO Cuttack will contribute to facilitate habitat enrichment.

Socioeconomic of the Local Community:

The anthropogenic pressure is high around the DIOM lease (<5 km radius) mainly due to livestock grazing, movement of human and tree lopping. However, the disturbances due to anthropogenic pressures were observed to be very low in areas close to the mining lease. The human population around the DIOM lease which also part of proposed Similipal-Satkosia Corridor is either farmers or daily labourers with an average annual household income from agriculture Rs.13, 237.5. The community around the Daitari iron ore mining lease is dependent on the forest for fuel wood, livestock fodder, and non-timber forest product that provides an average annual income of Rs.19,577 and from livestock Rs 25,625.

The forest area applied for diversion (746.3325 ha) by the DIOM of OMCL to MoEF&CC has been reduced by ICFRE to 309.66 ha after thorough review of mining plan, resource available, quality, the existing infrastructure area and conceptual mining to exploit the resources available with overall view to lessen the damages perceived on the forest, land use, and the overall environment. The proposed expansion based on the ICFRE modified area, if considered, by MoEF&CC. GOI is likely to have less impacts on the community income derived from forest such as fuel wood, fodder and other non-wood forest produce because totally an area of 613.05 ha forest will be preserved. The Talapada village where shifting (podu) cultivation was practiced by the local community which is under Gramya Jungle within the lease used for Podo/Jhoom/Shifting cultivation is being investigated by Keonjhar Wildlife Division of State Forest Department appropriately.

Photographs of Field Visit by the Sub-committee:

VIEW OF SINDURAMUNDI 1&2 FROM DAITARI HILL TOP PIT

MAGAZINE DUMP AREA (DUMP-2)

TALAPADA DUMP (DUMP-1) AREA

SHIFTING CULTIVATION AREA

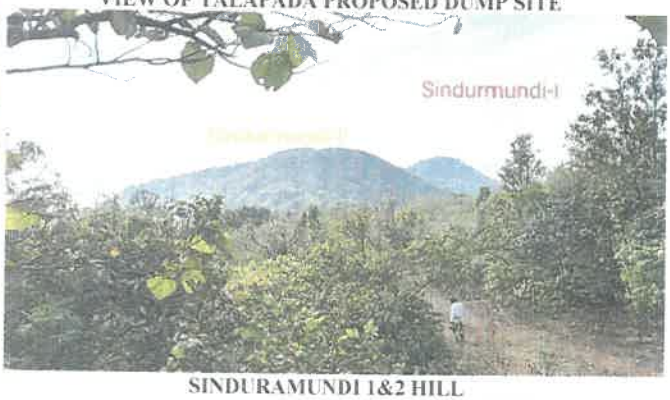
TALAPADA ENCROACHMENT AREA

ROAD FROM DAITARI HILL TOP TO SINDURAMUNDI 1&2 DEPOSIT

VIEW OF SINDURAMUNDI FROM HILL TOP

VIEW OF TALAPADA PROPOSED DUMP SITE

TALAPADA DUMP (DUMP-I) AREA



SINDURAMUNDI 1&2 HILL

DAITARI HILL TOP PIT

DAITARI HILL TOP PIT

The recommendations of ICFRE is as follows:

Recommendations proposed to be implemented by OMC

Following mitigation measures are recommended for biodiversity conservation in the forest corridor connecting the Similipal and Satkosia Tiger Reserve:

1. The forest area surrounding the Daitari Hill top mine has high biodiversity value. Further expansion of the broken area will certainly affect the existing biodiversity and ecosystem service value of the area along with least cost path of Schedule I species viz. Asian elephant and Sloth bear. However, in the face of developmental needs and economic growth a trade off is required for maintaining the optimal productivity of the

area and biodiversity conservation. Therefore, it is proposed that further extraction of the iron ore from Daitari hilltop mine may be permitted by extending the broken area to a maximum of 200 m width from the existing perimeter.

2. The waste generated from the expansion should not be dumped in the leased area. Care should be taken so that the waste generated should not affect the natural drainage of the area.
3. Mining at Sindurmundi should be initiated only after the exhaustion of Daitari hill top quarry. Prior to the initiation of opening up of proposed Sindurmundi, major portion of the exiting hilltop mines needs to be reclaimed for forestry intervention.
4. It is proposed to erect and maintain solar-electric fences around the lease area to prevent the entry of large and medium-sized wild animals into the mining lease area.
5. Minimum disturbance to the vegetation beyond the broken boundary should be ensured. Cutting, loping and destruction of vegetation need to be avoided.
6. There is no wildlife monitoring team in OMC. It is therefore recommended to form a wildlife monitoring team comprising of scientists and Field researchers for continuous monitoring of impacts of mining in the area.
7. Wildlife around the mine (<10 km) should be monitored regularly till the Daitari ore mining lease is operational and maintain the status report annually to the Govt. of Odisha.
8. Any damage to human life and property may be compensated by the Forest Department, but a delayed payment of compensation creates hostility against the wild animals. To avoid such situations, it is recommended that OMC in association with Odisha Forest Department create a revolving fund from which interim relief in terms of money will be given to the victims.
9. The conveyer belt hampers the free movement of wildlife in the forest corridor connecting the Similipal and Satkosia Tiger Reserves. This conveyer belt is 11 km long passing through Talapada and Baliparbat beats of Keonjhar WL Division. It is therefore recommended to raise the height of the conveyer belt to 6 to 8 meters from the ground to facilitate the movement of large herbivores, particularly the Asian elephants following the guidelines suggested in the report "Eco-friendly measures to mitigate impact of linear infrastructure on wildlife prepared by wildlife Institute of India".
10. Frequent movement of the large number of heavy vehicles should be strictly avoided in and around the mining lease area.
11. The concrete barrier (curb wall) on either side of the road between the conveyer belt and Bali Parbat should be replaced with low height rubble walls to facilitate the movement of wild animals in the forest. Construction of concrete roads within the mining lease should be avoided.
12. Fencing with barbed wire hampers movement and cause injuries to the wild animals. These wires are dangerous for small to large ungulates such as chital and Sambar. Antlers of these ungulates wedged in these barbed wires causing grave injuries while passing across. Hence, it is recommended to remove the barbed wire fitted on cemented pillar on TS4 road towards Bali Parbat.

13. At least 5% of the revenue generated should be kept aside for the conservation and development activities within the corridor forest by creating a separate fund under the joint control of OMC and Odisha Forest Department.

14. For the sustainable development and protection of the environment around the mining area, the OMC should establish a monitoring committee with senior representatives from OMC, Forest Department, District Development Officer, Conservation biologist/Scientist and District Medical Officers etc. The Committee should be appropriately empowered to effectively monitor, manage, and regulate the mining activities in a manner that the mining at Daitari will have least impact on the wildlife and its habitat, which inter alia would require measure to be taken for restoration of the mining affected area as well as entire corridor forest.

Recommendations to be implemented by the Odisha Forest Department

The following recommendation should be implemented by the Forest Departments within the Similipal - Satkosia corridor at the landscape level as well as around the mines. Some part (~10%) of the funds allocated to CSR activities by mines should be used in wildlife monitoring.

1. The forest corridor connecting the Similipal and Satkosia Tiger Reserves is fragmented. However, the area is highly suitable for threatened and protected mammalian species (e.g., Asian Elephant, Leopard, Sloth bear) and other large to medium-sized mammalian species (e.g., Barking deer, Grey langur). Hence, further extension of any mining activities in the forest corridor connecting the Similipal and Satkosia Tiger Reserves should not be encouraged so as to maintain integrity of the corridor and the long-term conservation of wildlife in the landscape.

2. A landscape level management plan for the entire forest corridor linking the Similipal-Satkosia Tiger Reserve needs to be prepared where existing mining area needs to be delineated and their cumulative impact and mitigation measures may be put in place.

3. The areas around the Daitari iron ore mining lease, i.e., southern part of Keonjhar WD, northern part of Cuttack FD, Dhenkanal FD, southern part of Angul FD, and eastern part of Athamallik FD support high density and diversity of trees that sustain high biodiversity. Besides, the area is highly suitable for more than six mammalian species including threatened and protected species, viz., Asian Elephant, Leopard and Sloth bear. Hence, an area of about 544.39 km2 around the Daitari iron ore mining lease, i.e., southern part of Keonjhar WD (195.47 km2), northern part of Cuttack FD (226.46 km2) and eastern region of Dhenkanal FD (122.46 km2) within the forest corridor may be given immediate protection under the Indian Wild Life (Protection) Act, 1972.

4. An area of 408.56 km2 in the central part of the Similipal - Satkosia corridor including 361.28 km2 in Dhenkanal FD and 47.18 km2 in Angul FD was found to be suitable for more than six mammalian species including Asian elephant and sloth bear. These areas are proposed to brought under the purview of Indian Wild Life (Protection) Act, 1972.

5. In western part of the corridor, an area of 596.28 km2 including 255.09 km2 in Angul FD and 341.19 Km2 in Athamallik FD was suitable for more than 6 mammalian species. These areas are proposed to brought under the purview of Indian Wild Life (Protection) Act, 1972.

6. Restore the degraded habitats, particularly in forest divisions falling in the eastern part of the Similipal-Satkosia corridor, viz., Keonjhar WD and maintain the existing habitat to stop further fragmentation. Afforestation activities should be carried out focusing on the eastern portion of the Dhenkanal FD and whole Keonjhar WD to maintain and strengthen the connectivity of the forest corridor between Similipal and Satkosia Tiger Reserves.

7. The forest corridor between Similipal and Satkosia Tiger Reserves has high anthropogenic activities in the form of hunting and poaching, free-ranging dogs, and collection of fuel-wood and fodder. In such scenarios, any further increase in anthropogenic pressures would influence herbivore composition and abundance. It is therefore recommended that governmental and non-governmental mining companies in the landscape should provide and generate direct and indirect employment opportunities to regulate the magnitude of anthropogenic disturbances.

8. Various developmental activities such as National highways, railway tracks and habitat fragmentation due to human settlements are serious challenges to wildlife movement in the Similipal-Satkosia corridor. A series of PMGSY roads in Satkosia corridor route, tribal settlements, National Highways between Ghatgaon and Kolimati, between Satkosia and Gaudadiuha, National Highway-23 passing from Khalpal Reserve Forest, road and railway track passing from Ekghari Reserve Forest, Railway track between Kumnunda and Talchar forest ranges, National Highway-55 and double line railway track between Kadarimunda Reserve Forest and Dantarilhol Reserve Forest, Athamallik FD are a serious hindrances to the movement of Asian elephant and other large mammals. Hence, overpass and underpass should be constructed by National Highway Authority of India (NHAI) at all national and state highways and railway tracks by Indian Railways passing through the Similipal-Satkosia corridor to facilitate the movement of animals. The dimension of underpass is should follow the guidelines given by Wildlife Institute of India on eco-friendly measures to mitigate impacts of linear infrastructure on wildlife.

9. The study of land use/land cover (LU/LC) changes is very important to detect spatial changes taking place in the habitats for conservation planning. Forest Departments are recommended to monitor the habitat in the Similipal-Satkosia corridor at five years intervals using remote sensing data. This will accurately illustrate changes in the course of habitat modification due to mining and other anthropogenic activities.

10. Regular monitoring of plant community structure is imperative to reduce the proliferation of invasive species. This should be carried out once every two years to accurately monitor the trend in vegetation change, especially to check the spread of invasive species like Chromolaenaodorata, Colebrookeaoppositifolia, Lantana camara, and Mesosphaerumsuaveolens. This will allow required steps to be taken on time.

11. The wealth of any forest depends upon its potential regenerative performance. Hence regeneration should be monitored at every two-year interval around the mines to determine the regenerative status of the forest.

12. Birds should be monitored during summer (March-June) and winter (December-January) every year. Non-government Organizations (NGOs) and other local institutions should be involved in conducting bird surveys. The survey should be led by properly trained people who are adept at bird identification. Results of the annual

monitoring programme should be analyzed to assess the trends in population changes and change in species composition as well as identification of Endangered / Critically Endangered species along with the historical data.

13. Monitoring of mammals should be conducted around the mines at a regular interval of two years through camera trapping. Camera traps should be deployed covering all major habitats using a grid-based sampling approach.

14. Assessment of status of other faunal taxa such as herpetofauna, spiders and butterflies should be conducted annually to understand the species dynamics and community composition.

15. Monitoring of fish communities serves as a tool to indicate the ecological health of aquatic ecosystems. Therefore, monitoring of fish is recommended in the waterbodies around the mines annually using standard protocols.

Recommendation for socio-economic development in the area

1. The OMC is obligated to undertake CSR activity (under Section 135 of Companies Act, 2013) for ensuring environment sustainability, ecological balance, protection of flora and fauna, conservation of natural resources and maintaining the quality of soil, air and water in and around the forest corridor linking both the Tiger Reserves. To fulfill the same, the OMC must undertake required activities for conservation of the wildlife and its habitat in the forest corridor linking the Similipal and Satkosia Tiger Reserves. The said activities must also promote community participation and conservation education at ground level to achieve its desired objectives and sustainable development in the area. Further guidance on these can be obtained from the monitoring committee.

2. As there is a heavy influx of 'outsiders' used as the workforce in the current scenario, there is a need for concentrated efforts to include local people in the formal employment generated through mining. People from villages around 10 km buffer of the mining should be targeted in order to be formally trained into mining-related skilled jobs. Mining companies in the area should ensure that at least 20-25% of total households from each village located around the mines (<5km) should get formal employment in the mining activities and CSR schemes, including OMC supported MGNREGA activities. Unskilled labour should be utilised in the non-mining activities of the company, such as in hospital staff, road and infrastructure management, etc.

3. Should get formal employment in the mining activities and CSR schemes, including OMC supported MGNREGA activities. Unskilled labour should be utilised in the non-mining activities of the company, such as in hospital staff, road and infrastructure management, etc.

4. The women from the local villages should be encouraged and appropriately trained to make Self Help Groups (SHGs) in order to increase their skills of making local forest produce products like brooms, toothbrushes, handicrafts and improving their credit structure in the lack of a formal banking system.

5. The number of health centres should be increased in and around 10 km buffer of the mining to regulate the problem of several illnesses due to pollution-induced by mining. The existing hospital in the Daitari township is only accessible to nearby villagers; thus, at least four health centres should be established in Sandhyaposhi in the north,

Brahmanipal and Nagada villages in the east, to regularly conduct free health check-ups and medicines.

6. The scholarship programme based on both merit and economic background should be introduced exclusively for the local children in order to facilitate better education opportunities outside the region.
7. The temporary labour settlements around the mines should be managed by the mining company in order to improve cleanliness, sanitation, clean water availability. The regular health check-ups of both formal and informal employees should be conducted on quarterly basis.
8. Educate and spread awareness the local community about the process of compensation and to deal with human-wildlife conflict situations, inform the forest department authorities and act as per their advice.

Observations of the sub-committee after Field Visit :

The subcommittees constituted by the Ministry vide OM dated 10th of May carried out a detailed field visit of the area on 8th and 9th of August 2023. The subcommittee inspected the area under mining at present, the area proposed for mining by Odisha Govt. and the area recommended in the ICFRE report in consultation with WII. The proposed dumping areas were also inspected. Various points of the existing mining area, proposed area and area recommended for mining by ICFRE were also inspected and their locations cross checked with the help of GPS and the maps. Various records were consulted, and after detailed discussions with Odisha Forest Department, field staff of Forest and wildlife divisions and OMC officials, the committee observes as under:

1) ICFRE vide its report has recommended diversion of 248.65 Ha only (ICFRE Report Page no 394, Vol I) as per details given below:
   Area recommended for mining- 160.82 Ha
   Area recommended for waste dump II- 78.09 ha
   Area recommended for waste dump I- 3.78Ha
   Area recommended for conveyer and magazine- 2.8 Ha
   Area recommended for proposed Road- 3.16 Ha
   Total - 248.65 Ha
2) The subcommittee after thorough examination of ICFRE report and WII report concurs with the recommendation as made in ICFRE report. However, the subcommittee is of the opinion that while concurring with the proposal of diversion of 160.82Ha of Forest land for mining, the user agency may be advised to work in phases and tree felling should be in phases under monitoring by MOEF.
3) State Govt. vide their letter No.5048 dated 17.03.2023 has agreed with the recommendation of ICFRE barring the issue of Tiger Corridor. The Nodal Officer said that NTCA is still carrying out their corridor identification.

   As per letter No. 2099 dated 28.02.2023 of CF (Eco tourism) O/o PCCF (WL) & CWLW that area does not fall within Tiger corridor is based on the KML file obtained from the website of NTCA. It is imperative to mention that (a) study about tiger corridor is under way and (b) what is uploaded on website on NTCA is the proposed corridor.

The committee is of the opinion that let the study be completed, tiger corridor declared and pending the same, the mining will be outside the corridor obtained from KML file from the website of NTCA.

1) For mining requirement to reach up to desired extractable mine reserve they require to go deep and for that more wider area is required for extraction, haul road, safety and other mining requirements. Hence the area already cleared under Stage-II for mining i.e. 95.60 ha from which the actual mining is in 79.18 ha or 80 is required, cannot be reduced.

2) The contention of the ICFRE report and the requirement of OMC to work Hill top mine area (i.e. 95.60 ha) and Sindurmundi I & II simultaneously is also justifiable, keeping the marketability with blending of ore from both the area i.e. Sindurmundi I & II and Hill top mining lease.

3) Now coming to area proposed by ICFRE and agreed by OMC i.e. (405.26 ha.) break up is on Annexure-I, the area required for deposition of overburden is 142.03 ha. This 142.03 ha has forest land of 81.87 ha and 60.16 ha of non-forest area.

   During the site visit the issue of finding out possibility of dump disposition in non-forest area, officials accompanying the team mentioned that due to steep slope and couple of Nala, it is not possible to treat part of non-forest area for dumping the over burden. The argument or the stand by the OMC official is neither supported by water resource/hydrological Department of State nor by reputed agency.

   The committee feels that even if the stand by OMC may prove to be correct, the possibility of diversion of Nala, keeping the watershed in mind and levelling ground along with other relevant aspects should be studied by either concerned department of State or by reputed institute for finding out availability/possibilities for alternative dump site.

   The Committee also made following observations for OMC:
   1. Acquiring other non-forest area for dump
   2. Consider non-forest area from original mining lease of 1780 ha and from the area which was surrendered or reduced to 1080 ha.
   3. Adopting the area as per the suggestion by ICFRE, forest, biodiversity, hotspots for wildlife, proposed Similipal-Satkosia corridor, socio-economic of the local community, water resource and habitat will improve.

   If at all the possibility exists, it will save 61 ha forest area proposed to be used for dumping over burden.

Approval conveyed through e-mail on13.02.2024
(Manoj Pant)
Non-Official Member of AC

15/02/24
(Susanta Nanda)
PCCF & Nodal Officer (FCA)
Government of Odisha

Approval conveyed through e-mail on14.02.2024
(S. D. Vora)
Non-Official Member of AC

(A. T. Mishra)
DDGF (Central)
Regional Office, Bhubaneswar

Annex-I

Table 2.8a: Details of ICFRE suggested area required for development of scientific and systematic mining for DIOM, OMCL, Odisha

Area Particulars	As per ICFRE Observation			
	Forest Area (ha)		Non-Forest Area (ha)	Total Area (ha)
	Diverted Area	Proposed Diversion Area		
Area for excavation (Incl. part of existing Hill Top (79.18 ha) + proposed Hill Top expansion (34.27 ha.) = 113.45 ha)	79.18	34.27	0.00	113.45
Area for excavation (Sindurmundi Deposit-II)	0.00	69.63	0.00	69.63
Area for excavation (Sindurmundi Deposit-I)	0.00	56.92	0.00	56.92
Sub Total	**79.18**	**160.82**	**0.00**	**240.00**
Waste Dump (Near Talapada) (PD-1)	0.00	3.78	60.16	63.94
Waste Dump (Near Old Magazine) (PD-2)	0.00	78.09	0	78.09
Existing Mineral Storage (included in 95.60 ha of already diverted Forest land)	9.96	0.00	0	9.96
Proposed Infrastructure (Conveyor + Magazine)	0.00	2.80	0	2.80
Road (Proposed)	0.00	3.16	0.85	4.01
Existing Road (included in 95.60 ha.of already diverted forest land)	5.44	0.00	0	5.44
Existing Mineral Processing Plant (included in 95.60 ha of already diverted forest land)	1.02	0.00	0	1.02
Total	**95.60**	**248.65**	**61.01**	**405.26**
Statutory Barrier	0.00	12.00	1.28	13.28
Others	0.00	489.25	110.53	599.77
Grand Total	**95.60**	**749.89**	**172.82**	**1018.31**

Note: As per ICFRE observation, the proposed forest area to be diverted for mining and its allied activities: 248.65 ha.
Total area required for diversion for mining & allied activities: (Forest area: 248.65 ha + Non Forest area: 61.01 ha = Total 309.66 ha).