

RECOMMENDATION OF DEPUTY DIRECTOR GENERAL OF FORESTS (CENTRAL)

The instant proposal is for diversion of 266.847 Ha of forest land (including 6.776 Ha earmarked for Safety Zone) within Rantha Iron Ore Mines under LahuniparaTahasil and Barsuan Range of Bonai Forest Division of Sundargarh District within Mining Lease area of 268.84 Ha in respect of Odisha Mining Corporation Ltd. under Section 2 (1)(ii) of Van (SanrakshanEvamSamvardhan) Adhiniyam, 1980.

The site inspection of the above project was carried out by Smt. Padma Mahanti, Dy. Inspector General of Forests (C)

The Dy. Inspector General of Forests (C) has reported that this is a pristine forest of Sal and Sal associates with good regeneration. This area is an elephant habitat as well and seen the presence of tiger in recent times. The instant proposed site is at a distance of 2.06 Km from Khandadhar Waterfall. It is in upstream of Khandadhar Waterfall. Any mining activity in the catchment of Khandadhar Waterfall will ultimately result in death of the waterfall itself, which is a natural heritage, considered as pride of Odisha and serves as a livelihood to the local communities and tribal who depend on it for tourism, water security, agriculture and traditional cultural practice.

Based on the above observations, the inspecting officer **has suggested not to recommend the proposal.**

I agree with the recommendation of the inspecting officer.

The proposal is not recommended.



(A.T. Mishra)

Dy. Director General of Forests (Central)

SITE INSPECTION REPORT IN RESPECT OF PROPOSAL FOR DIVERSION OF 266.847 HA OF FOREST LAND (INCLUDING 6.776 HA EARMARKED FOR SAFETY ZONE) WITHIN RANTHA IRON ORE MINES UNDER LAHUNIPARA TAHASIL AND BARSUAN RANGE OF BONAI FOREST DIVISION OF SUNDARGARH DISTRICT WITHIN MINING LEASE AREA OF 268.84 HA IN RESPECT OF ODISHA MINING CORPORATION LIMITED UNDER SECTION-2 (1) (II) OF VAN (SANRAKSHAN EVAM SAMVARDHAN) ADHINIYAM, 1980. (FP/OR/MIN/33970/2018).

The site inspection of the above project was carried out by the undersigned on 03.12.2024 along with the DFO, Bonai and other officials from Forest Department and User agency.

1. Legal status of the forest land proposed for diversion

The legal status of forest land is as follows:

Reserve Forest	195.858 Ha
PRF	70.989 Ha
Total	266.847 Ha

Sl. No.	Types of Forest Land	Area allotted in Ha.	Area already diverted for Conveyor Corridor	Total in ha.
1.	Khandadhar R.F.	195.858	1.849	197.707
2.	Khandadhar PRF	1.173	0.122	1.295
3.	Sarkunda PRF	69.816	0.022	69.837
	Total	266.847	1.993	268.839

2. Item-wise break-up details of the forest land proposed for diversion:

Sl. No.	Pattern of utilization	Area proposed in Ha.
1.	Mining with haul road	166.555
2.	Over Burden Dump	53.343
3.	Infrastructure and ancillary services (Haul road, mineral stock yard, separation unit conveyor belt etc.)	33.586
4.	7.5 mt. strip along inner side of the ML boundary	6.776
5.	50 mt. on either side of perennial Nallah	6.587
	Sub-Total	266.847
6.	Conveyor Corridor by OMC (already approved in a separate proposal)	1.993
	Total	268.840

As reported by the State Govt. an area of 6.776 ha has been earmarked for Safety zone within the ML area.

3. Whether proposal involves any construction of buildings (including residential) or not. If yes, details thereof:

Yes as reported above Table at Sl. No. 3.

4. Total cost of the project at present rates:

The total cost of the project is reported to be Rs. 5204.8 Lakh.

5. Wildlife:

The DFO, Bonai Forest Division has reported that wildlife such as Elephant *{Elephas indicus}* Sloth bear *(Melursus ursinus)* Hanuman langur *{Presbytes entel/us}* Indian giant squirrel *(Ratufa indica)*/ Jungle Cat *(Fe/is chaus}* Mongoose *(Herpestes edwardsii}* Indian Hare *{Lepus nigricollis}*/ Fox *(Vu/pes bengalensis)* Rat *(Bandicota indica)* Wild boar *(Sus scrota)* Jackal *(Canis aureus)* Indian pangolin *(Manis crassicaudata)* Porcupine *(Hystrix indica}* Hyaena *(Hyaena hyaena)* Peacock *(Pavo cristatus)* and different types of Snakes and Birds have been recorded from the applied area. However, no wildlife was seen during the site inspection.

Whether forest area proposed for diversion is important from wildlife point of view or not:

The applied area does not form part of any National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Tiger Reserve/ Elephant Corridor. There are rare/ endangered/ unique species of flora and fauna in the forest area proposed for diversion. The distance of project site from the nearest Protected area (Badrama Wildlife Sanctuary) is 76.55 Kms. The project site is 27.45 Kms away from the nearest Elephant Corridor (Karo-Karampada).

Elephant movement is observed frequently in the nearby applied area. The effect of purpose of diversion on the eco-social value of the applied forest area is negligible.

This area has recently been inhabited by Tiger, which has been captured in Camera trap in various locations within 10 km radius. This was informed by the Forest Officials and locals during the site inspection.

6. Vegetation:

The forest land proposed for diversion falls under Eco-Value Class- I and canopy density is 0.75.

(a) **Total number of trees to be felled.**

Total **85,829** no. of trees have been enumerated in the forest land proposed for diversion.

Tree enumeration has been taken up by the DFO, Bonai Forest Division over proposed 246.770 ha forest land of Rantha iron ore mine of Odisha Mining Corporation Limited adopting sampling technique. Total 20 nos of sample plots of 2.0 ha each has been laid over the forest land and tree enumeration has been done on the sample plots. Trees above 30 cm girth have been enumerated on the sample plots counting 13,312 nos in aggregate. Total tree enumeration have been conducted in the pre-80, broken up land, Safety zone 7.5 mtr along the inner boundary and 50 mtr on either side of the existing Nalla. The details of the enumeration done by the DFO, Bonai is given below.

SI. No	Component	Total area of tree enumeration conducted in ha	Sample/ Total enumeration	Tree per ha in Sample enumeration	Total
1	246.770 ha FL (including 1.993 ha already diverted earlier)	246.770	Sample enumeration over 20 sample plots of 2.0 ha each	13312/40 = 332.8	82125
2	Pre-1980 Broken up	8.707	Total enumeration	-	251
3	Safety Zone 7.5 mtr along	6.776	Total enumeration	-	2103

	inner boundary				
4	SO mtr. Either side of the nalla	6.587	Total enumeration	-	1350
Total		268.840	-	-	85829

Effect of removal of trees on the general ecosystem in the area:

Felling of trees will affect the general ecosystem of the area. Trees should be felled in a phased manner when absolutely essential to remove to minimize the adverse impact on the eco-system.

b) Important species:

The tree species available in the applied area are Sal (*Shorea robusta*), Sidha (*lagerstroemia parviflora*), Sisoo (*Dalbergia latifolia*), Amla (*Emblica otninalis*), Kusum (*Schleichera oleosa*), Bara (*Ficus bengtleasis*), Harida (*Termilalia chebula*), Bahada (*Terminalia belerica*), Char (*Buchanania /anjan*), Jamu (*Syzygium cwninil*), Asan (*Terminalia lomenlosa*), Kendu (*Diospyros melanoxylon*), Mahul (*Madhuca indica*), Kumbhi (*Careya arborea*), Mango (*Mangifera indica*), Achu (*Marinda tinctorla*), Arjun (*Termina/ia atjuna*), Bija (*Pterocarpus marsupium*), Chhatian (*Alsonia scholaric;*), Gambhari (*Gme/ina arborea*), Kasi (*Bridelia retusa*), Khakada (*Casearia e//iptica*), Sunari (*Cassia fistula*), Siris (*Albizzia /ebbek*) etc.

7. Background note on the proposal:

As per the State Govt. initially, the area over 408.8731 ha in village Rantha in Bonai Sub-Division of Sundargarh District was held under ML for Iron Ore by OMC Ltd. through a lease deed executed on dtd.31.12.1968 for 30 years. Application for grant of 1st renewal over 408.8731 ha in respect of Rantha ML for Iron Ore in Khandadhar RF, Khandadhar PRF (Village Rantha) and Sarkunda PRF in Sundargarh district for a further period of 20 years filed vide Letter No. 37666, dt.24.12.1997 under Rule 24 (A) of MC Rules, 1960 vide Form No.95, dt.26.12.1997 was pending for grant of lease due to want of Forest Clearance. On the basis of the Geological investigation, part of the ML area was found non-mineralized and OMC decided to surrender the same. Therefore, the revised 1st renewal mining lease application was filed before the State Govt. on dt.26.07.2010. The State Govt. vide Letter No.3142, dt.25.04.2018 communicated the authenticated precise area map and land schedule in respect of original retained area of 268.84 ha and proposed to surrender an area of 139.992 ha out of original granted and executed ML area of 408.8731 ha.

As per Rule-3 of Mineral (Mining by Government Companies) Rules, 2015 (03.12.2015) has been extended till 30.12.2038 as per the proceedings No.1203/SM, dt.09.02.2016 of Steel and Mines Department, Government of Odisha. Further, the Department of Steel & Mines vide their Proceedings No.5252/S&M, dt.22.07.2019 have accepted the part surrender area of 139.992 ha out of the total lease area of 408.832 ha in Rantha Iron Ore Mines.

The mine was in continuous operation since 1970 for supply of iron ore to different iron and steel industries and a total area of 8.707 ha has been utilized and broken-up by OMC Ltd. for mining and ancillary operations within the granted surface right area of 408.7730 ha.

As reported, the Mining lease comprises of forest land only. The land schedule as on 25.10.1980 duly signed by the Tahasildar, Lahunipara and DFO, Bonai Forest Division over 268.84 ha forest land including 1.993 ha forest land already diverted for establishment of conveyor corridor by OMC Ltd. has been submitted. The Land Schedule of the applied forest area over 266.847 ha has been submitted.

The ML area has been delineated in Survey of India, Topo Sheet No.F45N1 (73 G/1) which finds place within latitude 21°45'13.27" to 21°46'54.64" (North) and longitude 85°09'01.96" to 85°08'11.37" (East).

8. Compensatory afforestation:

As reported by DFO, Bonai, non-forest Government land over 19.44 ha has been identified in village Tarapadar under Thuamul Rampur Tahasil in Kalahandi District under Kalahandi South Forest Division against Rantha Iron Ore Mines of Odisha Mining Corporation Limited. Collector, Kalahandi has allotted Govt. non-forest land vide his letter dt.25.10.2019 over 19.44 ha vide L.No.13318 dt.20.08.2019. The CA land over 19.44 ha in Kalahandi district has jointly verified by the Tahasildar, Thuamul Rampur, DFO, Kalahandi South, Range Officer, Thuamul Rampur & R.I., Nakarundi under the jurisdiction of Kalahandi South Division and certificates regarding non-encroachment, non-encumbrance and land suitability for plantation, not covered under DLC report, not settled in favour of individual/Community under FRA, 2006 etc. have been furnished in the joint verification certificate.

Further, the State Govt. has reported that, balance non-forest land over 249.40 ha has been allotted by Collector, Koraput vide letter dtd.19.02.2022 in village Pami under Boipariguda Tahasil of Jeypore Forest Division in the District of Koraput. The joint verification of CA land over 249.40 ha in Koraput district duly verified by Tahasildar, Boipariguda, DFO, Jeypore, Range Officer, Boipariguda and R.I, Dasmantpur under Jeypore Forest Division and certificates regarding non-encroachment, non-encumbrance and land suitability for plantation, not covered under DLC report, not settled in favour of individual/ Community under FRA, 2006 etc. have been furnished in the joint verification certificate.

(a) Whether land for compensatory afforestation is suitable from plantation and management point of view or not:

The non-forest land identified is suitable from plantation and management point of view. The DFO, Bonai has furnished land suitability certificate with the proposal.

(b) Whether land for compensatory afforestation is free from encroachment/other encumbrances:

The Tahasildar, Th. Rampur, Tahasil, Kalahandi District have certified that non-forest C.A. land is free from encroachment and encumbrances and not covered under DLC report.

(c) Whether land for compensatory afforestation is important from Religious/Archaeological point of view:

It has been reported that the land for CA is not important from Religious/Archaeological point of view.

(d) Land identified for raising compensatory afforestation is in how many patches, whether patches are compact or not:

The non-forest CA land identified is in seven patches.

(e) Map with details:

The DGPS maps and SoI Toposheet (E44K6) indicating location of identified non-forest land for CA have been submitted by the State Govt.

(f) **Total financial outlay:**

The C.A. Scheme over 19.44 ha of non-forest land has been technically approved by PCCF (Nodal), Odisha with a financial outlay of Rs.1,85,51,600/- and CA Scheme over balance area of 249.40 ha non-forest land for financial outlay of Rs.12,94,06,000/-.

9. **Whether proposal involves violation of Forest (Conservation) Act, 1980 or not. If yes, a detailed report on violation including action taken against the concerned officials:**

As reported by the DFO, Bonai no violation has been committed by the user agency under Van (Sanrakshan Evam Samvardhan) Adhinyam, 1980. The same was verified in the field during the site inspection and no violation was found.

10. **Whether proposal involves rehabilitation of displaced persons. If yes, whether rehabilitation plan has been prepared by the State Government or not :**

The State Govt. has reported that the project does not involve any displacement of people. Hence, no rehabilitation plan has been envisaged although 2 small camps with hutments are found.

11. **Reclamation plan:**

As reported by the State Govt, a detailed scheme of reclamation and afforestation has been prepared to reclaim and stabilize the mined out undulating areas and the saturated dumps and by taking up plantations. The Phased Reclamation Plan, Map of the phased reclamation and afforestation has been submitted.

12. **Details on catchment and command area under the project:**

Not reported.

13. **Cost benefit ratio:**

As reported, the cost of forest diversion is assessed as Rs.9570.3797 lakhs and Benefit of the project is estimated at Rs. 55,16,294.208 lakhs. The Cost-Benefit ratio comes to 1 : 576.39.

14. **Recommendations of the Principal Chief Conservator of Forests/State Government:**

The forest area proposed for diversion has been duly recommended by PCCF.

15. **Utility of the project:**

As reported by State Govt., the project will generate employment for 190 persons directly who will be mostly of tribes. It will also create indirect employment for about 300 persons.

Numbers of Scheduled Caste/Scheduled Tribes to be benefited by the project:

Not reported.

16.

(a) **Whether land being diverted has any socio-cultural/ religious value:**

Not reported.

(b) Whether any sacred grove or very old growth trees/forests exist in the areas proposed for diversion:

Not reported.

(c) Whether the land under diversion forms part of any unique eco-system:

The proposed mining area is in the vicinity of the Khandadhar waterfall, which is the lifeline of the tribal and local communities of Sundergarh District located in Bonai Forest Division. The local tribes depend on this waterfall for cultivation, livelihood, tourism, cultural practices and it is considered as natural heritage of Odisha. Even the wildlife of the area depends on this water source.

As per a report published by National Centre for Advocacy Studies in February, 2009, the Khandadhar Hill Range, little known to people outside Orissa, where it is located, is a part of the Eastern Ghats and extends from a place called Suakanthi in Keonjhar district to Bonai in Sundergarh district. The range is more popular, especially amongst the state's tourists, for its two enormous waterfalls, one on the Keonjhar side in Bansapal and the other, more taller one, almost 244 metres, in Lohanipada block, Bonai tehsil of Sundergarh district. Emerging from a perennial stream, Karapani Nala, the waterfall on the Sundergarh sides feeds into the Brahmini river less than 5 kilometres away. It is a steep, rough but brief ascent from the forest at the base of the hill to the most accessible spot where the mighty Khandadhar waterfall greets you with its gushing yet calming sounds. The *Saal* (*Shorea Robusta*) forests do a good job of providing cover to the rock face along which the waters of the Karapani descend like silver tresses.

Fearing the wrath of goddess Kanteshwari who, it is believed, resides in a cave in the Khandadhar forest, the *Paudi Bhuiyans*, a primitive tribal community, who inhabit the forests in this region worship the Khandadhar waters and forests with reverence. Collection of non-timber forest produce, apart from agriculture, is the main source of self sustenance. Cultivation of paddy and *Mandiya*, *Kulath*, *Gangai*, *Rumha* (all indigenous lentils and millets) is common. The *Paudi Bhuiyas* traditionally practiced shifting agriculture locally referred to as *Podu*. This is done in a two year cycle in specifically demarcated areas (small hillocks around the village) decided upon collectively. Over the years many of them have been given legal titles to fixed land plots but villages closer to the base of the Khandadhar hills still practice *Podu*.

Eight Gram Panchayats of the Lunipada block with more than 50 villages within a 10 km radius of Khandadhar are being directly and indirectly affected by the mining activity.

The communities around Upper Khandadhar hills where the Koida mines are being operated by mining companies are facing similar problems.

More than 26 streams from the Khandadhar hills flow into the Brahmini river and hence the range forms a critical watershed in the region.

17. Situation with respect to any Protected Area:

The proposed site within Sarkunda PRF, Khandadhar PRF and Khandadhar RF of Bonai Forest Division.

The distance of project site from the nearest Protected area (Badrama Wildlife Sanctuary) is 76.55 Kms. The project site is 27.45 Kms away from the nearest Elephant Corridor (Karo-Karampada).

18. Any other information relating to the project:

The proposed site was visited on 3rd December, 2024 along with DFO, Bonai. Some of the photographs of the proposed site for diversion is as below:



19. Recommendations of Dy. Director General of Forests (Central) along with detailed reasons:

Enclosed separately.

Observations made during the Site Inspection:

During the site inspection it was observed that the proposed area comes under the very dense forest category. This is a patch of pristine forest of Sal and Sal associates with good regeneration, is roughly at a distance of 2.06 km from Khandadhar Waterfall. It is in upstream of Khandadhar Waterfalls. Any mining activity in the catchment of Khandadhar Waterfall will ultimately result in death of the waterfall itself, which is a natural heritage, considered as pride of Odisha and serves as a livelihood to the local communities and tribal who depend on it for tourism, water security, agriculture and traditional cultural practices. It also provides water to the wild denizens. This area is an elephant habitat as well and seen the presence of tiger too in recent times.

85,829 trees are to be felled in this project which may result in irreparable environmental loss to this pristine habitat of high conservation value.

Further, the local communities during interaction have pointed out that the water flow and intensity of the waterfall has already diminished considerably over the years due to heavy mining activity around the Khandadhar waterfall in Bonai Forest Division. There are 46 working mines in Bonai Forest Division itself. This proposed site is adjacent to the Kurmitar Mines of OMC already operating in this area. Further mining activity negates the concept of sustainable mining itself. The adjacent area needs to be ecologically restored after removal of minerals.

The local communities also opined that this proposed project area is a feeder to many water bodies downstream. **No scientific study has been conducted to study the impact of ongoing mining activity on the water regime of the Khandadhar hills in particulars and Bonai Forest Division in general. Hence scientific study needs to be conducted to ascertain the impact of ongoing mining activities in Bonai Forest Division and its impact on the water regime of the area and the flow of water in the water fall and its catchment. A detailed catchment study of Khandadhar waterfall needs to be conducted to ensure the water regime of the catchment area and its contribution in general and a study on the proposed project site needs to be carried out specifically to evaluate and estimate the amount of water contributed by this patch of forest land to the water regime in general and**

Khandadhar waterfall in particular. No further mining activity should be allowed in the catchment of Khandadhar waterfall and efforts should be made to restore the waterfall to its original to ensure water security to the region.

Considering the vulnerability of the area and considering the future of the Khandadhar Water fall which is life line of Bonai Forest Division and livelihood of the tribal communities dependent on Khandadhar without restoration of the already mined out area like Kurmitar in the close proximity, any further mining activity will lead to extinction of the waterfall itself. This proposal is not recommended because of aforesaid observations.

Padma Mahanti

**(Dr. Padma Mahanti)
Dy. Inspector General of Forests (Central)**