

Site inspection report for diversion of 149.7343 (135.7743 ha + 13.96 ha of forest land) hectares of forest land M/s. Nirmal Kumar Pradeep Kumar Karpada and Ghatkudi Iron Ore Mining Jharkhand State, Ranchi.

The site inspection of the above project was carried out by the undersigned on 16th and 17th November, 2017 in the presence of Assistant Conservator of Forests Saranda forest division Sh I.D.Minz, user agency represented by Mines manager Sh Anil Rahi, Geologist Sh Samar Kumar Das, Surveyor Sh Dhananjay Sutar, and other field staff.

1. Legal status of the forest land proposed for diversion:

The legal status of the forest land is Reserve forests.

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

Sl. No.	Pattern of Land Utilisation	Already Approved Forest Land (in ha.)	Proposed for renewal of approval area (in ha.)	Virgin Forest Land Proposed for diversion (in ha.)	Final Proposed Forest Land use Pattern (in ha.)	Remarks
1.	Mining including mines road	12.581	12.581	79.037	91.636	(+) 0.364 already diverted dump area is proposed to be included in mining where as existing mining area of 0.346 ha. Is proposed to be used as safety zone along electric line.
2.	Dumping with environmental protective measures	0.364	0.364	0.000	-	-
3.	Sub-grade Ore Stacking (Temporary)	0.000	0.000	4.322	4.322	-
4.	Road	0.915	0.915	0.778	1.693	-
5.	Camp area/ Township/ Office/ Administrative buildings etc.	0.040	0.040	0.000	0.040	-

6.	Magazine with fencing & protected Area	0.050	0.050	0.000	0.050	-
7.	Area of Infrastructure-Mineral Processing/Beneficiation, Plant (Zero effluent discharge) crusher, screening etc.	0.000	0.000	7.314	7.314	-
8.	Weigh bridge, work shop etc.	0.010	0.010	0.500	0.510	-
Sub Total:-		13.960	13.960	91.951	105.565	
9.	Safety Zone Area					
	i. Along ML boundary	0.000	6.504	0.000	6.504	-
	ii. Along the road	0.000	0.000	16.758	16.758	
	iii. Along electric line	0.000	0.000	15.140	15.486	
	iv. Green belt	0.000	0.000	3.8543	3.8543	
	v. Nala	0.000	0.00	1.567	1.567	
Sub Total:-		0.000	6.504	37.3193	44.1693	
Grand Total:-		13.960	20.464	129.2703	149.7343	

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

Not reported.

4. Total cost of the project at present rates:

As per records the total cost of the proposed project is Rs.129.67/- Crores.

5. Wildlife:

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

Indian Elephant, Giant squirrel, Reptiles, Sloth bear, Barking deer, etc. have been reported in the area.

6. Vegetation:

The forest is Tropical Moist deciduous Peninsular Sal Forest comprising around 30 – 35% of quality Sal (Shorea robusta). The top canopy is mostly of Sal, the

middle and lower canopy is of miscellaneous species. The proposed area is virgin and has vast floral diversity. The area proposed for diversion seems to be moderately dense forested.

The forest and density of vegetation appears to be around **0.5 to 0.7**.

(a) Total number of trees to be felled/ submerged.

As per records enumeration has been done in virgin lease area by random sampling method, where total 10 sampling units of 1 ha sample unit each were enumerated. Accordingly total 10 ha area has been enumerated. As per enumeration trees with more than 60 cm diameter are around 6000 in number and trees with less than 60 cm diameter are 48117 in number are to be felled.

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

Mining projects have adverse effects on forest and wildlife. It will adversely affect the general eco-system of the area unless enough precautionary measures like reclamation and rehabilitation of the area, compensatory afforestation with native species are taken in an effective manner.

8. Compensatory afforestation:

Total 264.77 acres or 107.19 ha of non-forest land identified in 4 patches in four districts. As per records all the four DFO's have given the CA land suitability certificates Details of CA area is as under:

Sl No.	MAUZA	THANA	DISTRICT	AREA IN ACRES
01	SEERAHA	BISHRAMPUR Thana No.- 545	PALAMU	111.00
02	TOPATAND	TUNDI Thana No.- 161	DHANBAD	36.95
03	MARCHAIYA	DHURKI Thana no.- 176	GARHWA	82.97
04	KIRTANIYA	SATGAWAN Thana No.- 119	KODERMA	34.3
Total				264.77

Total Non-forest land required for CA – 95 Ha. Or 234.65 Acres.

Total Non-forest land identified is 264.77 Acres Or 107.19 Ha.

DSS analysis of the CA land:

CA land identified has been observed in the DSS and details are as under.

	Total area in hectares (Software calculated)	Area in hectares (as per DSS)	Forest cover Information (Area in hectares)				
			MDF	NON FOREST	OPEN FOREST	VDF	Total
Kirtania BND	13.902121	13.91	9	1	3	1	14
Mirchaiya NFL BND	33.540013	33.51	00	34	00	00	34
Sihra NFL BND	44.923922	44.87	00	45	00	00	45
Topatnar NFL BND	14.959329	14.97	00	11	4	00	15
Total	107.3254	107.26	9	91	7	1	108

Remarks as per DSS:

- In patch Kirtaniya the vegetation seems to be moderately dense.
- In other three patches some encroachments in the form of agricultural fields were noticed and forest representative informed that during the course of afforestation these encroachments will be removed.
- As per DSS total area is coming around 108 ha.

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

As per records land suitability certificate has been given by the concerned DFO. In one patch i.e Kirtaniya patch already the vegetation in this patch seems to be moderately densed.

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

In three patches some encroachments in the form of agricultural fields were noticed and forest representative informed that during the course of afforestation these encroachments will be removed.

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

Not reported.

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

Land identified for CA (non-forestland) is in four patches.

(c) Map with details:

Map along with the shape file annexed in the proposal.

(f) Total financial outlay:

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:

No violation of the Act by the user agency has been reported.

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

The proposal does not involve any displacement of people.

11. Reclamation plan:

Not applicable

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

Not applicable

Catchment area treatment plan to prevent siltation of reservoir:

13. Cost benefit ratio:

As reported it is **1: 127.06**.

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

Recommended by the PCCF / State Government.

15. Adl PCCF (Central) shall give detailed comments on whether there are any alternative routes/alignment for locating the project on the non-forest land:

Annexed separately.

16. Utility of the project:

The total mining lease area is under forest land and the valuable mineral deposit of iron falls in forest land. Considering the demand of the above mineral

by the growing Industries and also our captive use for Steel Industries, the exploitation of such mineral from the area is very essential to cater the requirement of such mineral based industries. Since the occurrence of the above mineral is site specific, which happens to fall in forest land, the area is required for diversion to win these mineral. The project is site specific as mineral deposits do occur in the appropriate site and this would definitely enhance the financial resources of the State in shape of royalty and other taxes etc.

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

Not reported.

(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:

Saranda forest where the mining lease is located is considered as the finest habitat for the Asiatic elephant.

18. Situation with respect to any Protected Area:

The proposed area is not a part of national Parks, Wild Life Sanctuary, Biosphere reserve or Tiger Reserve. However, the entire forest of Saranda Forest Division including the proposed mining lease area has been notified as core Area of Singhbhum Elephant Reserve vide notification no. Vanya Prandi -33/2000-3640 – VP dated 26.09.2001 of forest & Environment Department, Government of Jharkhand.

19. Any other information relating to the project:

- The proposed area falls within parts of Ghatkuri Compartment No. -32 & Karampada Compartment No. KP-36. The lease area is in boundary line of interstate of Orissa.
- The mining lease area is surrounded by mining lease areas of M/s SAIL on South-West, M/s Rameshwar Jute mills on South-East, Singhbhum mineral company on West and M/s Misrilal jain on North.
- The total lease area is 149.7343 ha. out of this 13.960 ha is broken area prior 1980 (already diverted in favour of user agency) and 91.951 ha.is virgin area (Excluding safety zone). The present project proposes to take up mining in remaining or unexplored part of the broken area.


- As per DSS parameters considered for inviolating the mining block, the proposed area for diversion falling under inviolate category on the basis of Decision Rule-1 (VDF of more than 1 SQ KM area).
- During the inspection it was found that no mining activity has been observed. The lease area and broken area under diversion are separately demarcated with RCC boundary pillars and the mining activity confined to the already diverted area 13.960 ha. Boundary pillars were randomly checked with hand held GPS instruments and are found to be correct.
- There are no perennial streams within the lease area, however few seasonal nallas flowing downwards following topography, which forms watershed for the river Koina.
- During the inspection it is noticed that approximately ten numbers of pits have been developed covering a broken area of 13.96 ha. Two pits named Rudi pit and Bottom pit seems to have reached its ultimate limit and needs to be expanded laterally for further exploitation of minerals while other pits are not fully exhausted.
- The canopy if opened is prone to soil erosion. It is very obligatory take up soil conservation works on large scale. To check the soil erosion check dams and other site specific SMC works throughout the lease hold area need to be taken up.
- The Saranda Forest where the mining lease is located is considered to be one of the finest habitats for Asiatic elephants. The user agency to implement a planned scheme for protection of Wild Life & Forest to mitigate the ill effects of mining which is being submitted along with the proposal for approval.
- Phase- wise mining and scientific reclamation of the area should be made mandatory and sufficient measures shall be taken up around the stacking area so that mining waste does not enter the natural stream and river system.


 (Vasanta Kiran Babu)
 DCF (central).

RECOMMENDATIONS OF ADDL. PRINCIPAL CHIEF CONSERVATOR OF FORESTS (CENTRAL)

The State Forest Department, PCCF & the Jharkhand State Government have recommended the proposal. The report also clarifies, it's not in inviolate area and the proposed area is not an isolated mine, rather is surrounded by different mines of other owners. The proposal is recommended for consideration for diversion taking into consideration of the comments of the State Government, site inspection report along with the following safeguards as may be deemed appropriate :-

1. Considering the reported facts that some of the mining pits of the 13.96 ha, already diverted & broken up areas are still not exhausted and the permission for additional diversions is also supposed to be terminated by the end of 2020, a part of the virgin area may be considered for diversion, reserving major part as green cover along with a phase wise well planned mining of the additional areas as may be diverted.
2. Soil water conservation measures, specially on first order nallahs within the lease may be taken up with construction of adequate check dams so that adverse impact of mining disturbance may be reduced.
3. The user agency also to provide cooking gas to all persons / households/ residing/ hauling in & around lease area, engaged in mining, transportation & allied activities due to this proposed diversion to mitigate exponential pressure for fuel wood within and in the surrounding forest areas.

 21.12.17

(R.K.Dey)

Addl. Principal Chief Conservator of Forests.

