

Sub: Diversion of balance forest land of 401.7824 ha including 7.2807 ha of safety zone out of total forest land of 519.7472 ha within total mining lease area of 618.576 ha for Iron Ore Mining in Gandhamardan (Block-A) mining lease in Keonjhar District, Odisha of M/s Odisha Mining Corporation Ltd. during 2nd renewal of mining lease period (likely to extended up to 31.03.2020 as per amended provision of MMDR Act, 2015)

1. The State Government of Odisha vide their letter No. 10F (Cons) 158/2015/6513/F&E dated 07.04.2016 submitted a proposal for diversion of balance forest land of 401.7824 ha including 7.2807 ha of safety zone out of total forest land of 519.7472 ha within total mining lease area of 618.576 ha for Iron Ore Mining in Gandhamardan (Block-A) mining lease in Keonjhar District, Odisha of M/s Odisha Mining Corporation Ltd. during 2nd renewal of mining lease period .
2. The facts related to the proposal as contained in the State Government's letter dated 07.04.2017 are given below in the form of fact sheet:

FACT SHEET

1.	Name of the Proposal	Diversion of balance forest land 401.7824 ha including 7.2807 ha of safety zone out of total forest land of 519.7472 ha within total mining lease area of 618.576 ha for Iron Ore Mining in Gandhamardan (Block-A) mining lease in Keonjhar District, Odisha of M/s Odisha Mining Corporation Ltd. during 2 nd renewal of mining lease period.
2.	Location (i) State (ii) District	Odisha Keonjhar
3.	Particulars of Forests: (i) Name of Forest Division and Forest area involved. (ii) Legal status/Sy.No.	Keonjhar Forest Division 401.7824 ha Proposed Reserved Forest 375.5607 ha Village Forest 26.2217 ha Total 401.7824 ha
4.	Vulnerability to erosion	Not given
5.	(i) Vegetation (ii) Density	-- The forest land applied for diversion involves Gandhamardan Proposed Reserved Forest and Village Forest land. Gandhamardan Proposed Reserved Forest comes under 3C/C _{2e} (ii) moist peninsular low level Sal Forest type under Champion & Seth classification with site quality-IV. The prevailing vegetation consists of Sal and its associates like <i>Pterocarpus marsupium</i> , <i>Terminalia alata</i> , <i>Embllica officinalis</i> , <i>bridelia retusa</i> , <i>Gmelina arborea</i> , <i>Cleisanthus collinus</i> , <i>Diospiros melanoxylon</i> etc. The crop canopy density varies from 0.3 to 0.4

	(iii) No. of trees enumerated/to be actually felled	87,591 number of trees above 30 cm girth and 2,054 number of poles have been enumerated over the applied forest area
6.	Whether area is significant from wildlife point of view	No rare or endangered flora & fauna is noticed in this area but however, movement of mega fauna like elephant is often noticed in the fringe area. <u>The area comes under the elephant habitat zone-2 of ORSAC, Bhubaneswar.</u>
7.	Whether forms part of National park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Corridor, etc. (if so, details of the area and comments of the Chief Wildlife Warden	The applied area does not form part of any National park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Corridor, etc. However, movement of wild elephants is often noticed in the fringe areas. The area comes under the elephant habitat zone-2 of ORSAC, Bhubaneswar.
8.	Whether any RET species of flora and fauna are found in the area. If so details thereof	No
9.	Approximate distance of the proposed site for diversion from boundary of forest.	Not given
10.	Whether any protected archaeological/ heritage site/defence establishment or any other important monuments is located in the area.	No
11.	Whether any work of in violation of the Forest (Conservation) Act, 1980 has been carried out (Yes/No). If yes details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress.	<p>Violation:</p> <p>(i) Illegal dumping of ores on forest land (Gandhamardan PRF) extracted from adjoining lease Block-B in the lease hold area of Block-A of dimension 200 mt x 40 mt (approx. 3.00 ha) at the common boundary with GPS location.</p> <p style="padding-left: 40px;">Latitude : N 21⁰ 37'04.5"</p> <p style="padding-left: 40px;">Longitude : E 85⁰ 30'47.2"</p> <p>(ii) 2 ha. of forest land (Gandhamardan PRF) has been illegally used for road in Block-A without approval in violation of the FC Act, 1980.</p> <p>Action taken:</p> <p>(i) Show Cause notice has been issued to the Regional Manager, Gandhamardan Iron ore mines, M/s OMC Ltd. vide letter No. 9513 dated 19.12.2011.</p> <p>(ii) OR Case No. 23 of 2015-16 has been booked and action is being taken for sanction and submission of prosecution in the Hon'ble Court of SDJM, Keonjhar.</p>

		<p>Present status:</p> <p>(i) Removal of dump from the OB dump site in Block-A is under progress, as per the direction of the Hon'ble Supreme Court of India vide their order dated 16.04.2012 and subsequent direction of Steel and Mines Department, Govt. of Odisha.</p> <p>(ii) The lessee has represented and submitted a proposal for use of the road under question which is under consideration at the level of MoEF&CC, Govt. of India</p>
12.	Whether the requirement of forest land as proposed by the user agency in col. 2 of Part-I is unavoidable and barest minimum for the project, if no recommended area item-wise with details of alternatives examined.	Yes
13.	Whether clearance under the Environment (protection) Act, 1986 is required?	Yes, (Pg-393-401/c) User Agency has accorded Environment clearance vide Ministry's letter no. J-11015/1088/2007-IA.II (M) dated 16.01.2009
14.	Compensatory Afforestation	
	(i) Details of non-forest area/degraded forest area identified for CA, its distance from adjoining forest, number of patches, size of each patches.	329.7743 ha of non-forest Govt. land identified in village Khamarpadar under Thuamulrampur Tahasil in Kalahandi District. (Pg-282-301/)
	(ii) Map showing non-forest/degraded forest area identified for CA and adjoining forest boundaries.	Submitted
	(iii) Detailed CA scheme including species to be planted, implementing agency, time schedule, cost structure, etc.	Detailed CA scheme is given and placed in file at Pg-282-301/c.
	(iv) Total financial outlay for CA	Rs. 3,19,61,400.00 (Pg-301/c)
	(v) Certificate from the competent authority regarding suitability of the area identified for CA and from management point of view.	Land Suitability certificate has been given by DFO, Kalahandi South Division Pg-45/c
15.	Catchment Area Treatment	NA
16.	Rehabilitation of Oustees a) No of families involved b) Category of families c) Details of rehabilitation plan	No Nil Nil

17.	Employment likely to be generated a) Whether the project is likely to generate employment b) Permanent/ Regular Employment (Number of person) c) Temporary Employment (Number of person-days)	Yes 377 2000
18.	Compliance of Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006	District Collector, Keonjhar has issued certificate regarding compliance of Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 for 519.7472 ha of forest land. (Pg-309-372/c) But only photocopy is submitted.
19.	Site Inspection Report by RCCF	Pg-81-84/c
20.	Cost Benefit Ratio	1:13.60 (Pg-251-253)
21.	Total Cost of the Project	Rs 10962.3135 (Rupees in Lakh)
22.	Total period for which the forest is proposed to be diverted (In years)	5 years
23.	Recommendation i. DFO	The DFO, Keonjhar intimated that the applied diversion proposal over 401.7824 (375.5607 ha Gandhamardan proposed reserved forest and 26.2217 ha village forest) is under 2 nd RML with effect from 21.05.2013 for a period of 20 years with validity up to 20.05.2033. However, the validity of the lease has to be appraised in the light of MMDR (amendment) Act, 2015. The proposed areas is unavoidable and the barest minimum for the purpose of mining. There is no sign of prevalence of endangered, threatened and vulnerable wild fauna in the said area except movement of wild elephant often noticed in the fringe areas. The proposed land use plan for the said forest land does not have adequate safe guard measures for maintaining ecological stability. Thus, it is suggested that the lessee may be stipulated to take up intensive SMC measures to arrest plausible soil erosion and ensuring conservation of the run off. In addition, it is also suggested that the lessee may be stipulated to earmark proportionate area as deemed fit for the purpose of stacking of top soil in the proposed land use plan. The proposed diversion of forest land will not attract displacement of people. The said proposal is therefore submitted for necessary approval under section 2 (ii) of FCA, 1980 taking the aforesaid facts into consideration. (Pg-80/c)

	<p>ii. RCCF</p> <p>iii. PCCF/Nodal Officer</p> <p>iv State Government</p>	<p>The RCCF intimated that the project may be considered for approval as per provision under section 2 (ii) of Forest (Conservation) Act, 1980, 1980 (Amended), on its own merit with the suggestion that condition may be imposed on the User Agency to take up intensive Soil & Moisture Conservation Measures in the lease area and to stack top soil separately in an earmarked area within the area proposed for dumping of overburden. (Pg-84/c)</p> <p>Recommended (Pg-85/c)</p> <p>Recommended (Pg-86/c)</p>
24.	<p>District Profile</p> <p>(i) Total Geographical area of the district/division</p> <p>(ii) Total Forest area/ Divisional Forest area</p> <p>(iii) Total area diverted since 1980</p> <p>(iv) Total CA stipulated since 1980 (Forest land)</p> <p>a. Forest land including penal CA</p> <p>b. Non Forest Land</p> <p>(v) Progress of Compensatory Afforestation</p> <p>a. Forest land</p> <p>b. Non Forest land</p>	<p>830300.00 ha</p> <p>336615.6293 ha</p> <p>10102.8195 ha (in 71 nos. of cases)</p> <p>C. A. 1669.6180 ha P. C. A. 4994.8675 ha</p> <p>C. A. 7247.7931 ha</p> <p>C.A. 1152.58 ha P.C.A 2996.34 ha</p> <p>C.A. 5983.9016 ha</p>

3. SITE INSPECTION REPORT OF THE REGIONAL OFFICE, BHUBANESWAR: The SIR has been carried by Shri R. K. Samal, IFS, Conservator of Forest © for this proposal on 28.07.2017 with the officials of State Forest Department and representatives of the User Agency. Regional Office, Bhubaneswar vide their letter no. 5-ORA 052/2007-FCE dated 30.10.2017 has submitted Site Inspection Report (SIR). The SIR is reproduced below:

1. Legal status of the forest land proposed for diversion

Proposed Reserve Forest-375.5607 ha.
Village Forest - 26.2217 ha.
Total - 401.7824 ha

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

Purpose of utilisation	Forest area in Ha. (virgin)		Forest area in Ha. (pre-80 broken)	Total forest land in Ha.
	PRF	VF		
Mining	306.2866	12.3715	19.51	338.1681
Dumping of overburden	3.5016	0	3.97	7.4716
Stacking of ore	0.4280	4.3597	0	4.7877
Sub-grade ore stacking	11.1385	0	0	11.1385
Processing and stacking	24.9305	3.9962	0	28.9267
Safety zone area of magazine (3.0 MT capacity)	4.0091	0	0	4.0091
Safety zone of the mining lease	1.7864	5.4943	0	7.2807
Total	352.0807	26.2217	23.48	401.7824

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

No. Does not involve construction of buildings including residential areas.

4. Total cost of the project at present rates:

Rs.109.62 crores

5. Wildlife:

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

No rare or endangered flora and fauna is noticed in this area but movement of mega fauna like elephant is often noticed in the fringe area. The area comes under the elephant habitat Zone-2 of ORSAC, Bhubaneswar. Apart from elephant, sloth bear and spotted deer are also seen in the area. **Earlier there has been report about death of two elephants by falling into the pits of Gandhamardan-B mine during July ,2005.**

6. Vegetation:

The applied forest land is a part of Gandhamardan PRF which comes under the type 3C/C_{2e} (ii) Moist Peninsular low level Sal forest type under Champion & Seth classification with canopy density 0.3 to 0.4 at the lower reaches and little higher at higher reaches and with site quality-IV.

(a) Total number of trees to be felled.

As per the sample plot estimation an estimated 87,591 number of trees above 30 cm girth and 2,054 number of poles have been enumerated over the applied forest area, which include 86,100 number of trees and 1,804 number of poles over virgin forest land of 378.3024 ha and 1,491 trees and 250 number of poles over broken up forest land of 23.48 ha.

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

The hills are having steep slopes and the area contains a lot of biodiversity and is very fragile. There will be loss of biodiversity as well as soil erosion.

(b) Important species:

The prevailing vegetation consists of Sal and its associates like Bija (*Pterocarpus marsupium*), Asan (*Terminalia alata*), Amla (*Embllica officinalis*), Kasi (*Bridelia retusa*), Gambhar (*Gmelina arborea*), Karada (*Cleistanthus collinus*), Kumbhi (*Careya arborea*), Kendu (*Dispyros melanoxyton*), etc. The main climbers associated with Sal (*Shorea robusta*) in these areas are Atundi (*Combretum decandrum*), Latapalash (*Butea superb*), Siali (*Bauhinia vahlii*), *Smilax tetraphylla*, etc. The important grass species are Sinkula (*Heteropogon contortus*), *Aplida mutica*, *Dicanthium carricosum*, Duba (*Cynodon dactylon*), *Chrysopogon aciculatus*, etc.

Number of trees of girth below 60 cm.

As reported by DFO Keonjhar the total Number of trees below 60 cm to be felled is 71,191.

Number of trees of girth above 60 cm.

As reported by DFO Keonjhar the total Number of trees above 60 cm to be felled 18,454.

7. Background note on the proposal:

The mining lease was granted for a period of 30 years in the name of Gandhamardan (Block-A) iron mines in favour of M/s OMC Ltd. for exploration of iron ore over an area of 618.5760 ha. in the revenue villages of Suakati & Daonra and Gandhamardan proposed reserved forest under Banspal Tahasil of Keonjhar district, Odisha vide letter No.III (A) A-11/13 dated 21st May, 1963, Mining & Geology Deptt., Govt. of Odisha. Thus, original mining lease was valid till 20.05.1993. The first renewal of mining lease application was filed by the lessee for iron ore over 618.5760 ha on 04.04.1992 i.e. one year prior to the expiry of lease. However, the renewal could not be obtained till the year 2012 and in the meantime the 2nd RML application was filed on 01.05.2012 for another period of 20 years.

The total mining lease area of Gandhamardan (Block-A) iron ore mines of M/s OMC Ltd. is 618.5760 ha. which involves 486.1340 ha. Proposed Reserved Forest, 33.6132 ha of Village Forest Land, 85.5772 ha non-forest Government land and 13.2516 ha non-forest tenanted land. The mining lease area is located within latitude 21° 36' 08.58286"N to 21° 37' 41.89734"N and longitude 85° 29' 13.06230" E to 85° 31' 16.78446" E of Survey of India toposheet No.73 G/6 and 73 G/10. The northern ML boundary of Gandhamardan Block-A Iron Ore Mines of M/s OMC Ltd. is common with the southern boundary of Gandhamardan Block –B Iron Ore Mines of M/s OMC Ltd.

The extent of land broken prior to 1980 in this lease is 73.291 ha. that includes 64.7242 ha. of forest land (57.3327 ha. PRF and 7.3915 ha. village forest) and 8.5672 ha of non-forest land. During 1st RML period, the State Government vide its letter dated 11.05.2007 had recommended for diversion of 117.9648 ha. of forest land (virgin forest land 76.7206 ha. and broken up forest land of 41.2442 ha.) out of 216.3617 ha of forest land proposed for diversion by the user agency considering wildlife concerns especially movement of elephants in the area. MoEF &CC, Government of India vide letter dated 17.02.2009 accorded State-I approval under Section-2 (ii) of FC Act, 1980 over 117.9648 ha. Now MOEF, Govt of India has accorded stage-II clearance for 41.2442 Ha of broken up forest land only a d to consider the balance 76.7206 ha of virgin forest land after getting the carrying capacity study report is available. Besides the above the

User agency needs 2.270 Ha of area for making a haulage road for carrying of materials from Top Quarry of Gandhamardan -B

OMC Ltd. had earlier approached the Hon'ble Supreme Court in IA No.3402/2012 with the prayer to restore the entire Gandhamardan-A mining lease in their favour and diversion of balance forest land in the lease taking note of Wildlife Institute of India vetting the required Wildlife Management Plan. On the basis of Hon'ble Supreme court order dated 16.04.2012 the user agency has filed forest diversion proposal for the remaining forest land i.e. 401.7874 ha. (total forest land 519.7472 ha – 117.9648 ha. already agreed for diversion in principle. The proposed forest land for diversion of 401.7824 ha. now consists of virgin PRF-352.0807 ha., Virgin VF-26.2217 and 23.48 ha. pre-1980 broken up forest land.

8. Compensatory afforestation:

Total forest land involved in this mining lease:	519.7472 ha.
(-) Forest land for which Stage-I approval order has been accorded and CA cost deposited:	117.9648 ha.
(-) Forest land broken up prior to 1980 for CA is not required:	64.7274 ha.
(-) Forest land coming within safety zone for which CA is not required:	7.2807 ha.
Non-forest land required for compensatory afforestation:	329.7743 ha.

329.7743 ha. has been identified in village Khamarpadar under Thuamul Rampur Tahasil of Kalahandi district in Kalahandi (South) Forest Division.

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

Yes. Suitability certificate given by Forest and Revenue authorities.

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

Yes.

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

No.

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

Land identified for raising CA is in 3 patches. The patches are compact.

(e) Map with details:

Enclosed in the diversion proposal.

(f) Total financial outlay:

The approved CA scheme has provisions for barbed wire fencing, special soil conservation measures, etc. tree species to be planted under the scheme are Teak (*Tectona grandis*), Karanj (*Pongamia piñnata*), Neem (*Azadiracta indica*), Amla (*Emblica officinalis*), Bahada (*Terminalia bellerica*), Mahul (*Madhuca indica*) and Sisoo (*Dalbergia sisoo*), etc. Total cost of CA is Rs. 3,19,61,400/-.

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:

Violation:

- (i) Illegal dumping of ores on forest land (Gandhamrdan PRF) extracted from adjoining lease Gandhamrdan Block-B in the lease hold area of Gandhamardan Block-A having dimension 200 mt x 40 mt (approx. 3.00 ha) at the common boundary with GPS location.

Latitude : N 21^o 37'04.5"

Longitude : E85^o 30'47.2"

- (ii) 2 ha. of forest land (Gandhamardan PRF) has been illegally used for road purpose in Gandhamardan Block-A without approval in violation of the FC Act, 1980.

Action taken:

- (i) Show cause notice has been issued to the Regional Manager, Gandhamardan Iron ore mines, M/s OMC Ltd. vide letter No. 9513 dated 19.12.2011 by DFO Keonjhar.
- (ii) OR Case No. 23BJ of 2015-16 has been booked. Prosecution sanctioned and submitted vide PR No.12 of 2016-17 in the Court of SDJM, Keonjhar by DFO Keonjhar.

Present status:

- (i) Removal of dump from the OB dump site in Block-A is under progress as per the direction of the Hon'ble Supreme Court of India vide their order dated 16.04.2012 and subsequent direction of Steel and Mines Department, Govt. of Odisha.
- (ii) The lessee has represented and submitted a proposal for use of the road under question which has been furnished to MoEF&CC, Govt. of India for consideration.

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

No.

11. Reclamation plan:

Details and financial allocation:

Reclamation will be carried after exhaustion of the mined out areas as per the mining plan.

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

Not applicable. However, it contains the Gandhamardan hills which are steep hills.

Catchment area treatment plan to prevent siltation of reservoir:

Not applicable.

13. Cost benefit ratio:

1:13.60

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

Yes. Recommended.

15. Recommendations of Addl. Principal Chief Conservator of Forests (Central) along with detailed reasons:

The site inspection report of CF (Central) for the proposal of application for diversion of balance forest land of 401.782 ha including 7.2807 ha of safety zone out of total forest land of 519.7472 ha within total mining lease area of 618.576 ha for iron ore mining in Gandhamardan (Block-A) mining lease in Keonjhar District, Odisha of M/s Odisha Mining corporation Ltd. is forwarded for consideration of the Ministry.

The proponent has one mine adjacent to this proposed site and both the sites are situated in the Gandhamardan hills, which is a pristine forest ecosystem of the State. Which is a habitat of wildlife including the flagship species, the elephants. **There had been alarming incidence of elephants death due to drowning in the dangerously exposed mining pits of OMC.**

Gandhamardan hills also cater to river Baitarani, through the feeder streams, which shall also be affected by mining activities. The Ministry may keep in mind these serious issues while considering this proposal.

16. Conservator of Forests shall give detailed comments on whether there are any alternative routes/alignment for locating the project on the non-forest land:

It is site specific and it cannot be shifted to any other forest or non-forest land.

17. Utility of the project:

It has been stated by the project authorities that about 377 people will get direct and 2000 people will get indirect employment.

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

The area has a lot of Scheduled Tribes population and is expected many of them to be benefited directly and indirectly.

18.

(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:

Yes, the area contain old growth trees existing in the natural state.

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

Yes, the area exhibits an undulated topography with varying elevations from 620 to 1009 metre above mean sea level. This is the southward extension of the North-South trending Gandhamardan hill and is a prominent physiographic unit with highest elevation 1061 metre above mean sea level occurring towards north of this area. It is stated that the local population depend this forest for various herbs and shrubs and firewood for meeting their day to day lives.

19. Situation with respect to any Protected Area:

There is no protected area nearby. Similipal Tiger Reserve is around 60 km away.

20. Any other information relating to the project:

The validity of the lease is till 31st March, 2020. The lease is adjacent to another lease of the same agency i.e. Gandhamardan-B. Total area of the Gandhamardan-B lease is 1590.87 ha. containing 1409.649 ha of forest area and out of this forest clearance has been given for 232.438 ha. and Stage-I clearance has been given for balance area of this lease. **The ecosystem of Gandhamardan hills will be severely damaged if mining is also taken up in the hill tops of the Gandhamardan-A area, rather the foot hills of Gandhamardan-A lease is covered with Lantana and Eupatorium weeds and mining has already been done and being used for storage of ore.** This also includes the roads that lead to Gandhamardan-B lease. For storage of iron ore and proper transportation from Gandhamardan-B mines the remaining broken up forest land prior to 1980 i.e. 23.48 ha. along with 2.270 ha for construction of haulage road will be sufficient for meeting the needs of the user agency as on date. **The balance virgin areas with natural forests may be kept intact and shall be operated once the Gandhamardan-B lease is exhausted of the stock of iron ore and progressively reclaimed. This will ensure containing the damage to the environment in this area and meeting the needs of the local people.** The mitigative measures proposed in the Wild Management Plan prepared by user agency and vetted by Wildlife Institute of India will reduce the ill-effects for movement of elephants and other wildlife in the region. The DSS report of the proposed mine is enclosed.

4. It is imperative to mention that in-principal approval for diversion of 117.9648 ha in Gandhamardan Block A was granted on 17.02.2009 subject to certain conditions prescribed therein including the condition No (6) which states that the approval under FCA, 1980 is restricted to 117.9648 ha & the possession of the balance forest area shall be taken over by the Forest Department before grant of the formal approval. However, this condition was waived off by the competent authority while issue of stage-II clearance for diversion of broken –up forest land of 41.2442 ha on 24.04.2017. The copies of in-principle approval dated 17.02.2009 and 24.04.2017 are placed at **F/X**.

The facts related to the above proposal may be placed before FAC in its meeting to be held on 16.11.2017 for their examination and appropriate recommendation.
