

SITE INSPECTION REPORT IN RESPECT OF DIVERSION OF 120.838 HA OF FOREST LAND FOR IRON ORE MINING UNDER SECTION 2 (II) AND FOR ACCORDING PERMISSION UNDER SECTION 2 (III) OF THE FOREST (CONSERVATION) ACT, 1980 FOR ENTIRE FOREST LAND OF 126.401 HA INCLUDING SAFETY ZONE AREA OF 5.563 HA IN FAVOUR OF M/S ESSAR STEEL INDIA LTD. WITHIN THEIR ALLOTTED GHORABURHANI-SAGASAH I IRON ORE BLOCK OF 139.165 HA LOCATED IN VILLAGE SAGASAH I, KALMONG, GHORABURHANI AND MENDHAMARUNI PRF-I IN KOIRA TEHSIL AND KOIRA RANGE UNDER BONAI FOREST DIVISION OF SUNDARGARH DISTRICT, ODISHA.

The site inspection of the above project was carried out by me on 25.10.2018 and 26.10.2018 along with DFO, Bonai Forest Division, staff of Keonjhar Forest Division and the personnel from the user agency.

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

A) Under Section 2 (ii) FC Act, 1980	
Legal Status	Forest area (ha)
PRF	73.953 ha
Revenue Forest	3.434 ha
DLC Forest	43.451 ha
Total	120.838 ha
B) Under Section 2 (iii) of FC Act, 1980	
Legal Status	Forest area (ha)
PRF	76.666 ha
Revenue Forest	3.794 ha
DLC Forest	45.941 ha
Total	126.401 ha

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

The item wise details of forest land proposed for diversion is furnished below:

i.	Mining with haul road	88.623 ha
ii.	Waste dump with environmental safeguard	8.590 ha
iii.	Mining processing	23.215 ha
iv.	Road	0.372 ha
v.	Magazine	0.038 ha
	Sub total	120.838 ha
	Safety zone	5.563 ha
	Total	126.401 ha

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

As stated in Point No 2.

4. Total cost of the project at present rates:

As reported by the State Government, the estimated cost of the project is 998.72 crore.

5. Wildlife:

As reported, wild fauna like monkey, jungle cat, rabbit, sloth bear and different types of snake and birds are seen in the applied area. Movement of wild elephants in the area has also been reported by PCCF, Odisha.

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

It has been reported by DFO, Bonai Forest Division that no rare or endangered or unique species of flora and fauna is found in the applied area. The applied area does not form part of National Park/Wildlife sanctuary/Bio sphere reserve/tiger reserve.

6. Vegetation:

The applied area comes under Eco value Class-1. The density of vegetation is 0.6.

a) Total number of trees to be felled:

As reported by DFO, Bonai Forest Division, as per sample enumeration, 4999 number of trees have been enumerated in 25 numbers of sample plots of 1 ha each within 120.838 ha of forest land applied for diversion.

As reported, 24168 numbers of trees are to be felled over 120.838 ha of forest land.

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

In general, the ecosystem of an area is disturbed due to any mining activity due to removal of trees. The proposed area is observed to be surrounded by working mines and therefore already disturbed.

b) Important species:

The tree species which are commonly noticed in the applied area are Sal, Teak, Sidha, Sisoo, Bandhan, Char, Dhaura, Kurum, Asan, Karanj, Mango, Kendu, Bahada, Jamun, Kusum, Gambhari, Mahul, etc.

Number of trees of girth below 60 cm.

As reported by DFO, Bonai Forest Division, about 15376 numbers of trees are girth below 60 cm.

Number of trees of girth above 60 cm.

As reported by DFO, Bonai Forest Division, about 8792 numbers of trees are girth above 60 cm.

7. Background note on the proposal:

As stated, M/s Essar Steel Limited was originally incorporated on 01.06.1976 under the Companies Act, 1956 as Essar Construction Limited. As per resolution passed by the Company under Section 21 of the above Act and approval obtained from Government of India thereon, the name of the Company has been changed to M/s Essar Steel India Limited.

The company has 12 MTPA Beneficiation Plant at Dabuna, Joda in Keonjhar district (Odisha), which is strategically established to leverage the rich iron ore deposits in the region.

M/s Essar Steel Limited has submitted the proposal for diversion of 120.838 ha of forest land for iron ore mining under Section 2 (ii) and for according permission under Section 2 (iii) of the Forest (Conservation) Act, 1980 for entire forest land of 126.401 ha including safety zone area of 5.563 ha in favour of M/s Essar Steel India Ltd. within their allotted Ghoraburhani-Sagasahi Iron Ore Block of 139.165 ha located in village Sagasahi, Kalmong, Ghoraburhani and Mendhamaruni PRF-I in Koira Tehsil and Koira Range under Bonai Forest Division of Sundargarh District, Odisha.

8. Compensatory afforestation:

State Govt. has informed that 120.838 ha of non-forest land has been identified in village Podadihi of Banspal Tehsil coming under BJP Range of Keonjhar Forest division in Keonjhar district for the purpose of raising compensatory afforestation. The DFO, Keonjhar has prepared a C.A. Scheme for taking up plantation over 120.838 ha in ANR mode @1000 plants per ha with 10 years maintenance along with barbed wire fencing around the plantation and provision of soil and moisture conservation with loose boulder check dam. The C.A. Scheme has been technically approved by APCCF (Nodal), Odisha with a total financial outlay of Rs.2,31,06,300/-.



The C.A. site was visited by me during inspection. There are two patches one of 74 hectares proposed for 1200 plants/ha and another of 46.838 hectares proposed for 1000 plants/ha. The nearest Beat Offices are at Banspal and Kumundi. The nearest forest is Raiguda PRF which is at about 6 km from the site. The river Baitarini is flowing at about 4 km from the site. The forest staff informed that the site nursery will be set up near the river side. The important species to be planted in the CA area are Neem, Karanj, Sisoo, Teak, etc.

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

The DFO, Keonjhar has certified that the identified non-forest land is suitable for plantation.

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

The Tehsildar, Banspal has submitted the non encroachment certificate of the allotted non forest land.

- 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:**

Two compact patches as mentioned above.

- e) **Map with details:**

Submitted.

- f) **Total financial outlay:**

As stated, the CA scheme has been technically approved by Addl. PCCF (FD & NO, FC Act) with a total financial outlay of Rs.2,31,06,300/-.

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:**

During field inspection an area of earlier mined out area of 0.5 hectare was visited by me. This appears to be some old excavations covered with a lot of overgrowth of shrubs and bushes. This does not seem to be a part of any systematic mining operation. Though the mining operation which appears to be manual is quite old, the time of excavation cannot be ascertained. **Hence appropriate penal compensatory afforestation may be imposed.**

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

As reported by the State Government, there will be no displacement of human habitation due to this project.

11. Reclamation plan:

The user agency has submitted a phased reclamation plan to undertake phased reclamation and rehabilitation of forest/non forest land to be affected by mining operation.

Details and financial allocation:

As per phase Reclamation Plan, the total expenditure for the proposed afforested area of 129.780 will be Rs.1,55,08,710/-. As stated, the back filling of mining pits will be carried out by the user agency during the mining operation.

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

Catchment area treatment plan to prevent siltation of reservoir:

Not applicable.

13. Cost benefit ratio:

As reported, the cost benefit ratio of the mining project is 1:23.

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

Recommended by the Principal Chief Conservator of Forests/State Government.

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

Appended separately.

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



Mining is a site specific activity. Therefore alternative routes or alignment is not possible. Besides, the DFO, Bonai has reported that the requirement of forest land as proposed by the user agency is unavoidable and barest minimum for the project.

17. Utility of the project:

As reported by the State Government, the project may generate employment opportunity for the local people.

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

The user agency has not reported the exact number of SC/STs to be benefitted by the project. However, since Sundergarh is a tribal district, the local tribals are likely to be benefitted by the project.

18.

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

No.

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:

Not reported.

19. Situation with respect to any Protected Area:

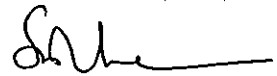
As informed by DFO, Bonai the nearest protected area, i.e. Debrigarh Wildlife Sanctuary is about 100 km away from the project.

20. Any other information relating to the project:

- a. The Mendhamaruni PRF is located on the hills and hill slopes. The PRF portion of the project site appears to be dense. The DLC and Revenue Forests are on plain land which appear to be less dense compared to be the PRF portion. The growth of sal and the associates in the PRF is very good. The user agency argues that the exclusive mining operation shall not take place in the dense portion, rather it will set up ore beneficiation plant, tailing pond and roads in the said area. However even for such activities, a number of trees have to be felled.
- b. The user agency has meanwhile submitted the Proposed land use plan, Reclamation Plan, Ghoraburhani-Sagasahi Iron Ore Block 5th year Development Plan of the Mining Plan and Surface run off Management Plan (which are attached as **Annexure-I**). As per the

mining plan, mining will be commenced at two pits, Pit 1 and Pit 2. Pit 1 is mainly DLC forest area and Pit 2 is PRF area. The excavation at Pit 2 i.e. PRF area will be at moderate rate for the first five years. By the end of five years, Pit 1 is expected to be exhausted, but Pit 2 will continue beyond 5th year. Later on another pit will be opened at the eastern part of Pit 2 in DLC area. In the first five years, about 70% of the production will be achieved from Pit 1 and the rest from Pit 2.

- c. As informed by the user agency, exclusive mining activity will be carried out in about 65% of the total lease hold area and the majority of it will be in the forest land. In the PRF area, half of the mining activities are proposed to be carried out. Besides mining, mineral processing such as screening, crushing, construction of beneficiation plant, etc. shall also be carried out in about half of the remaining PRF area.
- d. The proposed area for diversion is adjacent to 363.436 ha of area proposed for diversion under Section 2 (iii) of FC Act for the purpose of mining by M/S Pradhan Associates.
- e. DSS report on the project area over 139.165 ha (ML area) is enclosed as **Annexure-II**. As per the report, the forest type is 3C/2e (iii) Moist Peninsular Valley Sal forest. The forest cover includes about 90% MDF and the rest open forest and non forest.
- f. The proposed site is surrounded by many working mines such as Sanindpur Iron Ore & Bauxite Mines of M/s Rungta, M/s Kolmong Manganese Mines of M/s Rungta, Nuagaon Iron Mines of M/s KJS Ahluwallia, and it was observed that the surrounding forests have been disturbed due to mining activities.




(SUMAN MOHAPATRA)
CONSERVATOR OF FORESTS (CENTRAL)

RECOMMENDATION OF ADDL. PCCF (CENTRAL):

The instant proposal is for diversion of 120.838 ha of forest land for iron ore mining under section 2 (ii) and for according permission under section 2 (iii) of the Forest (Conservation) Act, 1980 for entire forest land of 126.401 ha including Safety Zone area of 5.563 ha in favour of M/s Essar Steel India Ltd. The Site Inspection Report of the CF (C) is enclosed for consideration of the Ministry along with the following additional observations of the undersigned:

1. The proposed area is for a fresh mining which is surrounded by many working mines and a few mining leases in the pipeline.
2. The forest area involved is mostly PRF having MDF cover. Though the density reported by DSS is 0.6, but the tree counting report and site inspection report shows the forests of the proposed site exhibit indications of ecological deterioration with more than 50% of the total trees unsound along with more than 60% unsound trees in the younger girth classes i.e. below 60 cm girth which may be due to mining disturbances going on all around. The diversion of this patch may not have much impact on the general ecosystem of the area.

Considering the situation of the proposed site and the fresh mining proposed in an already disturbed zone and analysing all the documents, reports submitted, this proposal is recommended for consideration for the grant of approval.


05.12.18
(R.K. DEY, IFS)
ADDL. PCCF (CENTRAL)