

SITE INSPECTION REPORT IN RESPECT OF DIVERSION 20.383 HA OF FOREST LAND FOR CONTINUATION OF MINING OPERATION AT BHUBANESWARI OCP OF MAHANADI COALFIELD LIMITED WITHIN THE MINING LEASE AREA OVER 658.724 HA UNDER ANGUL FOREST DIVISION OF ANGUL DISTRICT.

The site inspection of the above project was carried out by the undersigned on 12.01.2024 along with DFO, Angul and representatives from the user agency.

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

As reported by State Govt., legal status of the forest land is as below:

Legal Status		Forest Area (in Ha)
DLC Forest	:	20.383
Total		20.383

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

The purpose wise break up of 20.383 Ha DLC forest land proposed to be diverted is follows:

Sl. No.	Purpose	DLC forest land (in Ha)
1.	Mining Excavation	19.768
2.	Safety Zone	0.615
	Total	20.383

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

As per proposal only mining and safety zone has been proposed.

4. Total cost of the project at present rates:

As reported in Part-I of the proposal, the estimated cost of the project is reported to be Rs.49010 Lakhs.

5. Wildlife:

As reported by DFO, Angul wildlife present in and around the applied area are Wildboar (*Sus scrofa*), Barking deer (*Muntiacus*), Indian hare (*Leporidae*), Langur (*Semnopithecus*), Jackal (*Canis aureus*), Indian Pen fowl (*Pavo cristatus*), Bluejoy (*Cyanocitta cristata*), Egretta (*Novaehollandiae*), Kingfisher (*Alcedinidae*), Drongo (*Dicruridae*) etc.

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

The DFO, Angul Forest Division has reported that 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. It was also reported that the proposed site for the project does not come under eco-sensitive zone of any protected area.

6. Vegetation:

The DFO, Angul has reported that the canopy density of vegetation is reported to be 0.5 and Eco-value Class-I. The applied area sustains vegetation like of Sal (*Shorea robusta*), Bara (*Ficus bengalensis*), Chakunda (*Cassia tora*), Dimiri (*ficus recemosa*), Eucalyptus, Jamu (*Syzygium cumini*), Kaju (*Anacardium occidentale*), Kendu (*Diospyros melanoxylon*), Mahi (*Lannea coromandelica*), Mango (*Mangifera indica*), Neem (*Azadirachta indica*), Simili (*Bombax ceiba*), Sirisa (*Albizia lebbek*), Sisu (*Dalbergia sissoo*), Teak (*Tectona grandis*) etc.

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

Total 5800 nos. of trees has been enumerated over the applied area of 20.383 ha of forest land. Out of which 5251 nos. trees are above 30 cm girth and 549 nos. of trees below 30 cm girth.

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:**

As reported by the State Govt., the tree species available in the applied area are The applied area sustains vegetation like of Sal (*Shorea robusta*), Bara (*Ficus bengalensis*), Chakunda (*Cassia tora*), Dimiri (*ficus recemosa*), Eucalyptus, Jamu (*Syzygium cumini*), Kaju (*Anacardium occidentale*), Kendu (*Diospyros melanoxylon*), Mahi (*Lannea coromandelica*), Mango (*Mangifera indica*), Neem (*Azadirachta indica*), Simili (*Bombax ceiba*), Sirisa (*Albizia lebbek*), Sisu (*Dalbergia sissoo*), Teak (*Tectona grandis*) etc.

7. **Background note on the proposal:**

State Govt. reported that the Bhubaneswari OCP expansion project is an opencast project and located in Talcher Tahasil of Angul district of Odisha State. The total area of the project is 658.724 ha. Out of which the total forest land is only 132.904 ha. An area of 112.521 ha has already been diverted for Bhubaneswari OCP on 06.12.2004 against the proposal of 132.904 ha of forest land in 2002. The balance forest land of 20.383 ha is now required to be diverted for mining purpose as already diverted forest land is consumed and the status of 20.383 ha forest land is DLC forest. Bhubaneswari OCP has proposed a mining plan of 14.55 Sq. Km of block area, out of which 6.58 Sq. Km was approved and mining plan was also approved on 25.04.2022. The geology of the project is based on integrated Geological report on Coal exploration of Bhubaneswari, Arkhapal-A and Sakhigopal-A blocks prepared by CMPDI RI-VII in December, 2016 by CMPDIL on full payment basis from Mahanadi Coalfields Limited. The net coal reserve in the proposed geological area is 419.15 MT. Mineable coal reserve is 396.52 MT, while the extractable coal reserve is 396.52 MT which is also include around 21 MT in 20.383 ha. The annual production is around 30 MT. The life of the project is about 4 years excluding post-mining periods.

Since, coal is site specific, the proposed expansion of Bhubaneswari OCP in Bhubaneswari block and Arkhapal block with mine lease area of 658.724 ha which also involves 132.904 ha of forest land is vital. The total land involved for entire life of the project is 658.724 ha (525.82 ha non-forest land + 132.904 ha forest land). Diversion proposal for 132.904 ha of required forest land was submitted to MoEF IN 2002. However, as per the directives of MoEF&CC while granting EC for 20 MTY, forest land involved for 25 years of operation was assessed and accordingly FC was granted for 112.521 ha in 2004 against the proposal of 132.904 ha and it was directed to approach the MoEF&CC for the balance 20.383 ha of forest land after consumption of granted/diverted forest land in the mine area.

8. Compensatory afforestation:

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

The DFO, Angul Forest Division has reported that CA area has been proposed over 47.385 ha of degraded revenue forest land in village Karnapur of Talcher Tahasil of Angul District. The DFO, Angul has certified that the land identified for CA is suitable for plantation point of view.

The CA site was inspected and it was found that the site is little stony, so suitable species as per site condition should be planted for better survivability of plantation.

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

The Tahasildar, Talcher has certified that C.A. land is free from encroachment.

(b) 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.

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

As reported by the DFO, Angul the degraded Revenue forest land identified in village Karnapur under Talcher Tahasil of Angul District for raising compensatory afforestation is comprising 47.385 ha Ha in one patch.

(d) Map with details:

The DGPS map and SoI Toposheet indicating location of identified degraded Revenue forest land has been submitted by the State Govt.

(e) Total financial outlay:

The C.A. Scheme over 47.385 of degraded Revenue forest land has been technically approved by PCCF (Nodal), Odisha with a financial outlay of Rs.1,52,65,000/-.

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:

The DFO, Angul has reported that no violation has been noticed during the field inspection.

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 present proposed diversion of 20.383 ha of DLC forest land is part of 658.724 ha mine lease area of Bhubaneswari OCP project and Rehabilitation & Resettlement of these villages are part of the earlier R&R Plan, hence no additional R&R Plan is involved. Total project affected families involved are 1142 nos. These families have been resettled and rehabilitated socially, culturally and economically as per the latest R&R policy of Govt. of Odisha, May 2006. The detailed R&R executed plan has been submitted by the State Govt.

11. Mining Plan/Reclamation plan:

The Mining Plan including Mining Closure Plan has been prepared by the Central Mine Planning & Design Institute Limited has been submitted by the State Govt. The MCL in its 246th Board meeting held on 25.04.2022 has approved the Mining Plan of Bhubaneswari OCP.

The State Govt. has reported that the Phased Reclamation Plan has been submitted with the proposal. A detailed scheme of reclamation and afforestation has been prepared to reclaim and stabilize the mined out undulating areas through management of generated waste, preserved top soil adopting biological and other technical measures.

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

State Govt. has reported that no natural streams of any order exist in the area under consideration. However, due to extensive mining in the adjoining area, soil and moisture regime will be adversely affected.

13. Cost benefit ratio:

As reported, the cost of forest diversion is assessed as Rs.5621.84667 Lakhs and Benefit of the project is estimated at Rs.2146623.7357 Lakhs. The Cost Benefit ratio comes to 1 : 381.836.

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 in Part-I, the project will generate permanent employment of 1055 persons and temporary employment of 531648 person-days.

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:

No such report available.

17. Situation with respect to any Protected Area:

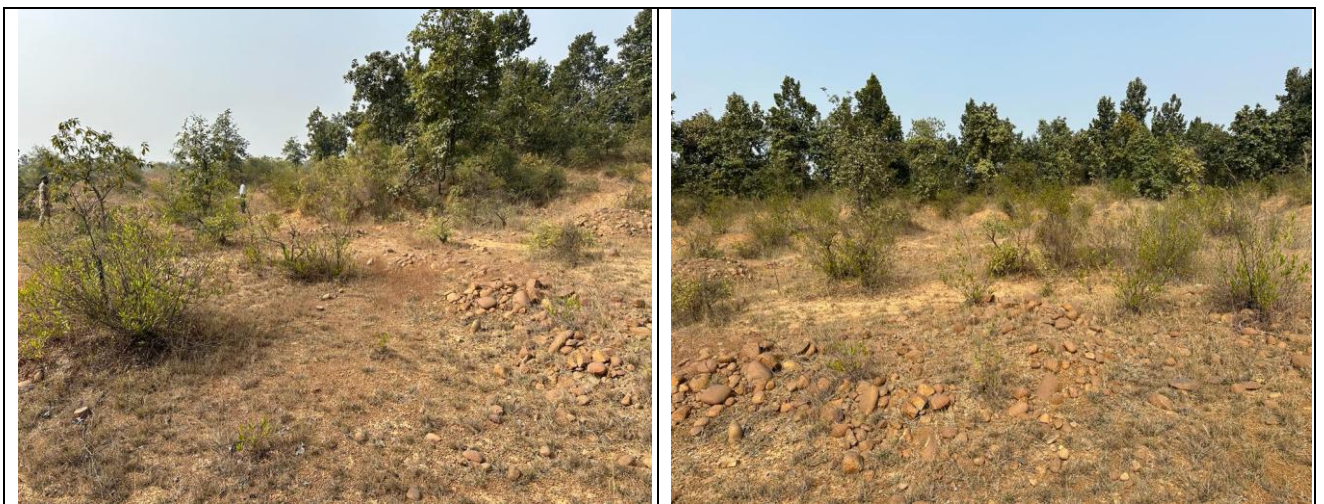
The DFO, Angul has reported that the distance of project site from the nearest Protected Area is more than 30 Km and the project site is 3.00 Km away from the nearest Elephant corridor.

18. Any other information relating to the project:

The proposed site was visited on 12.01.2024 along with DFO, Angul. Some of the photographs of the proposed site for diversion is as below:



Photographs of proposed site for diversion





Photographs of proposed C.A. site

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

1. The Bhubaneswari OCP expansion project is an opencast project and located in Talcher Tahasil of Angul district of Odisha State. The total area of the project is 658.724 ha. Out of which the total forest land is only 132.904 ha. An area of 112.521 ha has already been diverted for Bhubaneswari OCP on 06.12.2004 against the proposal of 132.904 ha of forest land in 2002. The balance forest land of 20.383 ha is now required to be diverted for mining
2. Total land involved in instant proposal is 20.383 ha DLC forest land.
3. The Mining Plan including Mine Closure Plan has been approved by the MCL in its 246th Board meeting held on 25.04.2022.
4. The State Govt. has reported present proposed diversion of 20.383 ha of DLC forest land is part of 658.724 ha mine lease area of Bhubaneswari OCP project and Rehabilitation & Resettlement of these villages are part of the earlier R&R Plan, hence no additional R&R Plan is involved.
5. The density of vegetation is reported to be 0.5 and Eco-value Class-I. Total 5800 nos. of trees has been enumerated over the applied area of 20.383 ha of forest land. Out of which 5251 nos. trees are above 30 cm girth and 549 nos. of trees below 30 cm girth. To minimize the adverse ecological impact, efforts should be done to mine this area in the last phase of mining operation.
6. The proposed site does not come under any Protected Area or within the Eco-Sensitive Zone of any Protected Area.
7. In order to mitigate the adverse impact on wildlife, Site Specific Wildlife Conservation Plan and Regional Wildlife Management Plan for entire mining lease as per approved norm of State Govt. is recommended.
8. Soil Conservation Plan in and around 10 Km of the proposed site may be undertaken.

This diversion proposal is for mining of coal, which is site specific. The user agency has identified 47.285 ha of degraded Revenue forest land for raising Compensatory Afforestation. The diversion of 20.383 ha of forest land may be considered with standard conditions and observation made during inspection.


(A.T. MISHRA)

DY. DIRECTOR GENERAL OF FORESTS (C)