



The Singareni Collieries Company Limited
(A Government Company)
YELLANDU AREA

Justification for Koyagudem OCP-III Project in 694.159 Ha. Forest area:

1. Quarry area: (302.52 Ha):

This is Coal bearing area. Hence site specific. The total coal reserves available in the proposed area is 111.98 Million tonnes.

2. Over Burden (Earthen material) dumping area in forest land : (295.96 Ha):

This project is planned to remove 867.75 M.cum of overburden with a stripping ratio of 7.75 Cum/t. Out of the total hard OB (864.73M.Cum), 460.26 M.Cum of hard OB (52.19%) will be dumped in the external dump yard {dump and voids of KOC-I and KOC-II(Pit-II & III) & land of infrastructures of KOC-II and Forest Land (to be diverted)} and the remaining 404.47 M.Cum of hard OB (47.81%) will be accommodated in the internal dump yard (back filling in the de-coaled area of the proposed KOC-III project quarry).

In addition, it is proposed to remove 2.13 M.cum of topsoil from the proposed area of external dump (forest land) for stabilization of external dump and to re-handle 1.2 M.cum of loose OB from the existing external dump of KOC-I for facilitating the quarry movement towards south side. Thus, the total OB to be handled throughout the project life will be 888.26 M.Cum.

Options available for External Dumping

- (a) Option of utilizing non forest land(located at N-E side of the proposed quarry) for external dumping:
- i. 400.45 Ha of land is required for OB of 309.22 M.cu.m
 - ii. Overall weighted average lead would be 6.05 Kms is high.
 - iii. Due to the increase in the lead there will be increase in the CO2 generation and more polluting the environment.
 - iv. The dump area covers 5 villages involving 358 PDF's and 39 PAF's.
 - v. The land is coal bearing area.
 - vi. This place lies in 'eco-sensitive zone'

This option can not be considered due to above reasons.

- (b) Option of dumping of OB on coal bearing area on S-W side of excavation:
- i. This land is coal bearing area and there will be a possibility of extending the proposed quarry further dip side in future.

This option can not be considered due to above reason.

- (c) Option of utilizing forest land for external dumping (approved in the FR):
- i. 295.96 Ha of forest land is required for OB of 288.96 M.cu.m.
 - ii. Overall weighted average lead would be 4.57 Kms
 - iii. No PDF's due to the dump area, as no village is involved in the area.
 - iv. The land is non coal bearing area.
 - v. The land does not attract any restrictions regarding eco-zone, Wild life sanctuary limit etc.
 - vi. The reduction in the dump area and volume in the external dump in this option is mainly due to merging of external dump with the internal dump (contiguous dumping) of the proposed project as the location is adjacent to the internal dumps of KOC-I, KOC-II along with that of KOC-III.
 - vii. Moreover, the OB dump yard place is site specific and comes under Mines act-1952 and is covered under mining lease and statutory mine boundary.
 - viii. The reduction in the lead and dump volume as above i.e., (C) i, reduces the travel distance of dumpers; in turn no. of fleet in operation, fuel requirement, dust, exhaust gasses etc., impact safety and environment positively.

Hence this option considered due to above reasons.

3. Safe Barriers (42.48 Ha.):

42.48 Ha is required to maintain the road for inspection, bund & transmission line around the quarry and garland drains, toe wall, bund & inspection road around dump (including safety zone).

4. CHP, Coal Yard, Belt Conveyor and railway siding (17.029 Ha.):

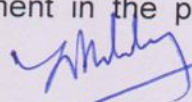
A Coal Yard and Pit Head CHP including railway CHP is proposed to be installed for the proposed project. Road dispatch will be from pit mouth on the Northern side of the quarry and rail dispatch is on the South East corner. It is proposed to transport the coal from pit mouth to the proposed location of rail CHP by series of belts for a length of 7.5 KM.

5. Nallah Diversion including settling tanks (36.30 Ha.):

A nallah (drain) flowing between KOC-I dump and Pit-II of KOC-II from north to south is to be diverted to facilitate merging of proposed external dump yard and the internal dump yard to minimize the requirement of land for external dump. The length of proposed diversion is around 3.36 km.

To avoid soil erosion and contamination of water, the bio engineering and SMC structures are proposed to be constructed, for which the area is required.

With this proposal the entire forest land requirement in the project, is bare minimum.



General Manager,
The S.C.Co,ltd
Yellandu Area