

Sub: Diversion of 285.44 hectares of forest land in Lankapalli R.F. of Khammam Division in favour of Singareni Collieries Company Limited (SCCL) for their Kistaram OCP.

1. The State Government of Andhra Pradesh vide their letter No. 2373/FOR.I (1)/ 2014 dated 20th May 2014 has submitted the above mentioned proposal to obtain prior approval of the Central Government, in terms of the Section 2 of the Forest (Conservation) Act, 1980.
2. The said proposal along with Site Inspection Report (SIR) received from the Regional Office (South Eastern Zone), Chennai was placed before the last Forest Advisory Committee (FAC) in its meeting held on dated 25.01.2018 for their examination and appropriate recommendations. FAC after examination of proposal and interaction with representatives of user agency observed as below:-
 - (i) The SCCL is a Government Company jointly owned by both the State and Central Governments. This is the only coal mining company in South India entrusted with the task of extracting the coal to meet the energy needs of South India. The activities of SCCL are spread over in Khammam, Warangal, Karimnagar and Adilabad districts of Andhra Pradesh. The SCCL is presently having 37 coal mining leases spread over in the above four districts. In these sanctioned leases, SCCL is operating 36 underground mines and 14 opencast mines producing around 52 million Tonnes of Coal per annum.
 - (ii) The SCCL has obtained Bhupalpalli Mining Lease over an extent of 2792 ha in Non-forest-land covering Kakatiya Khani (KTK) Nos., 1, 2, 3, 5 and 6 Incline mines. No.1 Incline (KTK-1) is an existing mine covered in the above mining lease in Bhupalpalli area, Warangal District, Andhra Pradesh. At present the mine is working in 3 seams, namely No.1, 2 and No. 3 seam in descending order. KTK - 1 incline property is partly covered in non - forest land and partly covered in forest land.
 - (iii) This mine is already possessing Additional Mining Lease in Tadicherla RF, Karimnagar East Division, Warangal Circle to an extent of 235 hectares sanctioned vide MoEF letter no. 8-40/99-FC, dt. 16.10.2000, for a period of 30 years. From recently drilled boreholes, it was found that the fault F2-F2 was shifted further towards West. Thus the area between the East side of Tadicherla Block - II and West side of (KTK-1) incline is named as 'KakatiyaKhani -1 (KTK-1) Incline Extension Block'. Out of the total area of extension block, an area of 128.77 Ha extending over strike length of 1.0 km and dip length of 1.3 kms having 5.70 million-tones of coal reserves is being proposed to be annexed to the ongoing KTK 1 Incl. KTK - 1 Incline including the proposed annexing block is covering an area of 506.75 hectares, out of which 142.98 hectares (Non RF) is covered in Bhupalpalli Mining Lease (valid up to 3.8.2029) and 235 hectares (RF) is covered in Additional Mining Lease for 30 years diverted vide MoEF letter dated 16.10.2000 (valid up to 15.10.2030). The balance 128.77 Hectares out of which 115.78 hectares is forest land and 12.99 hectares is non-forest land. Since the area proposed is extension to the existing mine property, no additional expenditure is required for extracting the coal from this block. As such, establishing of surface infrastructure can be avoided and the property can be extracted without disturbing surface, for which Mining lease is required to exploit the coal from this block through underground method of extraction. Hence, the present application is for Additional Mining Lease in RF in continuation to the existing mining lease and diversion is required for a period of 30 years.
 - (iv) The occurrence of coal deposits extending into forest area is as a nature's gift. The location of project is site specific. No surface structures will be raised in the proposed lease area, as such no diversion of surface forest land is required. The total forest land of 115.78 hectares is required for underground mining only is situated in Camp. Nos. 401 and 404 of Tadicherla RF, Bhupalpalli Range, Karimnagar (E) Division, Warangal Circle.
 - (v) There is no requirement of surface forest-land. The proposal is only for approval under FC Act 1980 for mining lease for underground operations at KTK - 1 Incline over 115.78 hectares of Tadicherla RF, Bhupalaplli Range, Karimnagar East Division, Warangal Circle, Andhra Pradesh for a period of 30 years.
 - (vi) This proposal is for grant of mining lease to carry out underground mining operations which will be conducted at a depth range of 90 m to 470 m. No diversion of surface forest land is involved. However

SCCL has agreed for payment of Compensation for the damage if any, caused to the forest on surface due to underground mining. The SCCL has also agreed for payment of NPV as per rules and an undertaking to this effect is enclosed.

- (vii) The user agency has certified that all other alternatives have been explored to minimize the requirements of forest land and the 115.78 hectares of forest land covering in Camp. No. 401 & 404 of Tadicherla RF proposed for diversion is bare minimum required for the proposed underground mining of KTK-I.
- (viii) Wildlife species such as Sambhar, Sloth bear, Chowsinga, Wild Boar and Peacock are available in and around the forest proposed to be diverted for non-forest purpose.
- (ix) The forest land proposed to be diverted was **inspected by the Regional Office (South Eastern Zone), Chennai**. Additional information pertaining to the proposal available in the site inspection report submitted by the Regional Office (South Eastern Zone), Chennai vide their letter dated 11th September 2014.
- (x) **The proposal was considered in FAC held on 20th -21st October, 2014.** FAC after detailed deliberations recommended that decision on grant of approval under the FC Act for diversion of forest land may be deferred till EIA, EMP and proceedings of the public hearings are considered by the Expert Appraisal Committee (EAC) for grant of Environmental Clearance to the project. The EAC may be advised to specifically examine the impact of the project on Sathupally town while formulating their recommendation. Meanwhile, the State Government may be requested to furnish their comments on the following issues:
 - a) Impact of the project on Sathupally town along with measures proposed to be undertaken to mitigate these impacts; and
 - b) Justification for diversion of forest land for non-site specific activities such as, overburden dumps, service buildings and external dumps along with full details of alternatives examined.
- (xi) The above recommendation of FAC was communicated to the State Government of Telangana vide Ministry's letter dated 21st November, 2014.
- (xii) The State Government of Telangana vide their letter No. 2373/FOR.I (1)/2014 dated 27.01.2017 has forwarded a point-wise reply submitted by the Principal Chief Conservator of Forests, Telangana (HoFF), in respect of MoEF& CC, GoI, New Delhi letter dated 21.11.2014, and the same is given under below:-

S. No.	Observations raised by FAC	Reply submitted by State Government
1.	Impact of the project on Sathupally town along with measures proposed to be undertaken to mitigate these impacts; and	In this regard the State Government informed that the user agency stated that the Kistaram OCP is located at a distance of 2 Km. from Sathupalli Town. Hence, there may not be much impact on the Sathupalli Town. Green belt will be developed all around the mine to prevent spread of dust to the adjoining areas. SCCL will continuously sprinkle water on the Haul roads, CHP to control spread of dust. Coal will be transported in tarpaulin covered lorries. Further, the project proponent has also stated vide letter dated 13.01.2016 and requested to the Director General, ICFRE, Dehradun to study the impact of the area Kistaram OC coal mining on Sathupalli town. Hence, whatever measures are recommended by ICFRE in addition to the measures proposed by SCCL, the same also will be implemented to mitigate the impacts, if any.

2.	Justification for diversion of forest land for non-site specific activities such as, overburden dumps, service buildings and external dumps along with full details of alternatives examined.	In this regard the State Government informed that the user agency stated that the total requirement of the land for Kistaram OCP is 435.68 ha of which 285.44 is Forest land. Of the total forest land required, 200.72 ha. is for quarry including drain and boundary around the quarry which are site specific. Of the balance 84.72 ha., 71.71 ha. is identified for dumping which is also site specific as dumping also mining activity and needs Mining Lease. In addition to this Forest land, available Non-forest land of 95.03 ha is identified for dump after leaving 27.91 ha of non-forest land for protecting Jagannadhapuram Tank (water body) as prescribed in condition No. (xvii). Total OB to be excavated in this Mine is 129.58 million cu.m. and the dump is proposed up to a maximum height of 120 m. in a total area of 166.74 Ha. which includes 71.71 Ha. of forest land. The land for OB dumping is required initially for a period of three years and thereafter OB will be accommodated in external and backfilling in de-coaled area simultaneously.
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(xiii) The Principal Chief Conservator of Forests, (HoFF), Telangana vide their letter No. 54546/2009/FCA-1, Dated 06.01.2017 has reported the **few additional points as well.**

(xiv) **The file was referred to IA division** for obtaining their **comments in the matter.** The IA division vide their note dated 22.08.17 informed that the proposal for grant of EC to Kistaram Open Cast Coal Mine project of 2 MTPA in mine lease area 435.68 ha of M/s SECL in district Khammam was considered the EAC in its 58th meeting held on 23-24 June, 2016 for forth meeting held on 30-31 January, 2017. **While deliberations on the proposal, the EAC took note on the following:**

- a) The observations of the FAC in its meeting held on 20-21 October, 2014 and subsequent clarifications sought from the state Government need to be clarified by the project proponent for its compatibility with the EIA/EMP reports and the public hearing. The Committee desired that the proposal may be considered by the FAC in parallel, and without any prejudice to the observations of the EAC.
- b) Source of Fluoride in the ground/assessed to suitably address the observations of the EAC.
- c) Year wise expenditure incurred on CSR activities indicate no definite trend with no firm planning and the budget estimate accordingly.

The EAC after detailed deliberation deferred the proposal for want of information on the above lines. The same was communicated to the project proponent and reply is awaited.

3. The project proponent was informed that the CA sites proposed earlier having encroachments and some of the proposed area for CA has been earmarked for departmental plantation and therefore the CA scheme is to be revised. Accordingly, the State Government of Telangana was requested vide this Ministry's letter dated 19.09.2017 to submit the approved revised CA scheme with suitability certificate and the shape / KML files for the revised CA along with shape file for proposed area of diversion for further consideration of the proposal in the Ministry.

4. The State Government vide their letter no. 2373/For.1 (1)/2014 dated 15.11.2017 has forwarded a copy of revised CA scheme with financial outlay of Rs. 1970.193 Lakh for treating an area 571.00 ha of degraded forest area in Khammam (227 ha) and Sathupally divisions (344 ha). Detailed CA scheme is placed in file at **642-742/c**.
5. The Shape file/ KML file of Revised CA sites has been examined by the DSS Cell and following observations have been made:
 - i. Calculated area of the shape files received for revised CA Area is found correct as per the requirement i.e. 571.78 ha.
 - ii. Legal status of revised CA land is found as Forest land i.e. Compartment no. 51,52,53 148,149,175 as per the recorded Forest Area boundary uploaded on DSS.
 - iii. As per the current boundaries, revised CA is provided in four patches falling in the same district namely Khammam.
 - iv. Out of total proposed CA area, 93 ha. of land having the canopy density of Moderately dense forest that with 75 ha. of land classified under Open forest Category in terms of forest classes (as per the ISFR 2015) based on the interpretation of satellite data period 2013-2014.
 - v. Patchwise details of proposed CA patches w.r.t density classes (based on interpretation of satellite data period 2013-14) as per ISFR 2015, are as follows:

(Area in ha.)

S.No.	Patch	Very Dense Forest	Moderately dense Forest	Open Forest	Scrub	Non-Forest land
1	Patch-I	0	92	12	0	123
2	Patch-II	0	0	0	0	40
3	Patch-III	0	0	0	0	23
4	Patch-IV	0	1	63	0	219
Total		0	93	75		405

6. After careful consideration of the facts placed before, FAC on 25.01.2018 the committee observed that:-
 - (i) Regional office has not recommended the project as yet even after carrying out the inspection of the site; hence it is observed that APCCF, Regional Office along with AIGFs concerned shall make a visit to the proposed land for diversion as well as land proposed for compensatory afforestation.
 - (ii) The above mentioned group would also inspect the previous compliances of the diverted cases by the same user agency.
7. As per the recommendations of FAC constituted a committee under the chairmanship of APCCF (C) was communicated to the State Government of Telangana vide its Ministry's letter dated 09.03.2018 (**Pg. 751/c**).
8. The Regional Office (South Eastern Zone) Chennai vide their letter No. 8-55/2014-FC / 0795 dated 23.05.2018 (**Pg. 753-960/c**). The committee has submitted a Site Inspection Report & previous project compliance report as carried out by the APCCF (C) Chennai, Nodal Officer (FCA) Telangana Government and AIGF (FC), MoEF & CC, and the same is given under below:
Reply:- The Ministry of Environment, Forests & Climate Change (Forest Conservation Division) vide letter F.No.8-55/2014-FC dated 09.03.2018 has requested the Additional Principal Chief Conservator of Forests (Central), MoEFCC, Regional Office (SEZ), Chennai along with Assistant Inspector Generals of Forests in the Forest Conservation Division of MoEFCC to visit the proposed land for diversion, land proposed for compensatory afforestation and inspect the previous

compliances of the diverted cases by the same user agency and submit the detailed report in this regard for further consideration of the proposal in the MoEFCC.

1. Introduction

The Singareni Collieries Company Limited (SCCL) has submitted proposal for diversion of 285.44 Ha. of Forest land in Lankapalli R.F. of Sathupalli Division (Erstwhile Khammam Division).

At the time of submission of application, SCCL identified Non-forest land for C.A. in Buttaigudem (M) of Eluru Forest Division, West Godavari District in un-divided Andhra Pradesh. As there was problem with the land identified for C.A., Forest Department identified degraded forest land double in extent as detailed below: -

Sl. No.	Division	Range	RF Block	Compt. No.	Net area available (in Ha.)
1.	Khammam	Khammam	Gubbagurthy	51, 52 & 53	227.00
2.	Sathupalli	Sathupalli	Annapureddipalli	148 & 140	282.00
		Sathupalli	Lankapalli	175	62.00
			Total		571.00

The Project site was earlier inspected on 03.07.2014 by the then Additional Principal Chief Conservator of Forests (Central), MoEFCC, Regional Office, Chennai and a report was submitted to MoEFCC on 11.09.2014 vide reference 1st cited. The proposal was discussed by the FAC in its meeting held on 21.10.2014 and as requested by MoEFCC in the letter 2nd cited, SCCL has furnished point-wise detailed justification vide reference 3rd cited, which was forwarded to MoEFCC by the State Government vide reference 4th cited.

The Forest Advisory Committee (FAC), in its meeting held on 25.01.2018, had, *inter alia*, recommended that –

- (i) the Regional Office has not recommended the project, as yet, even after carrying out the inspection of the site; hence, it is observed that APCCF, Regional Office along with AIGFs concerned shall make a visit to the proposed land for diversion as well as land proposed for compensatory afforestation; and
- (ii) the above mentioned group would also inspect the previous compliances of the diverted cases by the same user agency.

In pursuance of the above instructions, the undersigned, along with Shri Sandeep Sharma, Assistant Inspector General of Forests, MoEFCC, have inspected the area proposed for diversion for Kistaram OCP and also the degraded forest lands identified for C.A. from 2nd to 3rd May 2018 (The APCCF from 01 – 04 May 2018 and the AIGF from 02 – 04 May 2018). During the inspection, the status of compliance of conditions in respect of forest lands earlier diverted were also inspected.

On the basis of site inspection and based on written submission of the status of compliance of conditions in respect of the forest lands so far diverted for various projects/purposes to the MoEF & CC, New Delhi, Regional Office and also to the Nodal Officer by the user agency, discussions with the field forest officials and based on submissions of Pollution Control Board officials in the field, the following report is submitted.

2. Location of the project

The area 285.44 ha. of forest land proposed for diversion is located in the Lankapalli R.F. of Sathupalli Division in the State of Telangana for the purpose of Kistaram OCP in favour of Singareni Collieries Company Limited (SCCL).

3. Inspection of project area

3.1 On 03.05.2018, the team consisting of APCCF (Central) and AIGF from the Ministry along with APCCF & Nodal Officer, Telangana Government and Singareni officials inspected the project area of 285.44 ha. The land use details are furnished below: -

Sl. No.	Particulars	Land requirement (Ha.)		
		Forest	Non-forest	Total
1.	Quarry including Drain, Bund etc., around quarry	200.72	27.30	228.02
2.	External dumps including Drain, Toe wall etc.			
	a) Top Soil Dump.	13.98	0.78	14.76
	b) Hard OB Dump.	57.73	122.16	179.89
3.	Service buildings	4.36	0.00	4.36
4.	CHP & Coal Stock Yard	8.65	0.00	8.65
	TOTAL	285.44	150.24	435.68

The forest types mostly found are southern mixed dry deciduous forest 5A/C3 and mixed teak forest 5A/E4. Main tree species are *Anogeissus latifolia*, *Terminalia tomentosa*, *Chloroxylon swietenia*, *Tectona grandis* and *Dendrocalamus strictus*, etc.

The following fauna are commonly found: -

Nilgai, Blackbuck, Indian Bison, Leopard, Sambar and Jackal, etc.

The density of the forest is around 0.4. Eucalyptus clones plantations along with NTFP plantations and Bamboo are seen. Around one lakh trees are proposed to be felled once the area is diverted.

It is projected that the estimated coal reserves in this Project are 21.61 Million Tonnes of which about 20.71 Million Tonnes are in forest land. Annual production is said to be 2 million tones. SCCL has been granted status of CPSU for the purpose of C.A. vide MoEF Lr.No.11-423/2011-FC, dt.31.1.2013. Therefore, Forest Dept. identified double extent of degraded forest land and prepared C.A. Scheme.

Of the 285.44 Ha. of forest area required, 200.72 Ha. is required for quarry and 71.71 Ha. is required for top soil dump and hard OB dump. The Committee inter-acted with the Project Officials. Project Authorities have informed that they have already identified the available Non-forest land adjacent to the Forest land for dumping. Initially, land is required for dumping of OB for a period of 7 years and after which dumping will be in de-coaled area of the quarry. A total of 129.58 MM3

of OB is proposed to be dumped up to a maximum height of 120 mtrs. Other side of the quarry, there is a big village having about 1500 families. Hence, site for OB cannot be identified towards the village. In all other sides, only RF is existing. Between the quarry and available Non-forest land, minimum forest area of 71.71 Ha. which is unavoidable for operating the mine is identified for OB Dump.

As regards location of service buildings, CHP & coal yard, Committee discussed with Project Authorities about the possibility of re-locating the same either in the adjacent JVR OC mine or in Non-forest land.

Project Authorities have informed that as per the Mines Act, CHP and essential infrastructure come under definition of Mine which have Mining Lease and statutory mine boundary. Further, for transporting coal from the Mine, it will be transported through dumpers which are prohibited from crossing the high-way due to safety reasons. Further, even for transportation of coal from the mine, it is to be first crushed to load in to lorries for which CHP is invariably be located at Pit Mouth to reduce the travel distance of dumpers which will cause lot of dust generation along the route. Hence, for locating the CHP arrangements, a minimum of 8.68 Ha. is identified and another 4.36 Ha. for essential mine office and Work-shop for maintenance of Mining equipment. As such, shifting of CHP & essential infrastructure is not possible and the requirement is the bare minimum for operating OCP. As such, the 13.01 Ha. of forest land required for CHP, coal yard and essential office buildings are un-avoidable.

3.2 Inspection of CA areas proposed for present project

In the morning session, the team inspected the CA areas identified as degraded forest area of Patch-I covering 227 Ha. identified at Konijerla, Khammam Division. As per the minutes of the FAC meeting held on 25.1.2018, in Patch-I, 92.0 Ha. is shown as Moderately Dense Forest as per DSS. But, in the field, it is observed that this area is mostly covered with creeper type bushes (mainly *Calocopteris floribunda*). Most of the area is devoid of any growth. Hence, the entire 227.0 Ha. can be taken up for C.A. plantations.

The C.A. land identified at Patch-II & III covering 62 Ha. was also inspected. The entire area is degraded and suitable for C.A. plantations. The area of 282 Ha. (Patch-IV) identified at Annapuredipalli RF, Sathupalli Range could not be inspected due to heavy rain. But, as per DSS, except 1.0 Ha., the entire area is degraded and suitable for C.A. It is understood that this 1.0 Ha. is also covered with bushes and no trees are existing. Hence, the total area of 571.0 being double the extent of area proposed for diversion is found to be suitable for afforestation.

4. Need for present project, i.e., Kistaram OCP

During the interaction with the Forest Officials, it is informed that though presently 2 Opencast Mines (JVR OC-I & JVR OC-II) are in operation adjacent to the proposed Kistaram OCP, the JVR OCP-I which is producing about 3 Million Tonnes of Coal per annum is going to be closed in 2 years due to exhaustion of reserves. Hence, to continue the coal supply, as per the linkages fixed by Govt. of India, starting of Kistaram OCP is a must.

Regarding grant of Mining Lease under M&M(D&R)Act, 1957, User Agency has informed that Ministry of Coal, GoI, vide Lr.No.13016/3/2016-CA-II, dt.19.1.2017 has allocated the block for Mining Lease subject to Forestry Clearance. As regards, Environment Clearance, Project Authorities have also informed that Public Hearing was conducted on 19.11.2015 and EIA/EMP was submitted to MoEF & CC. The Project was appraised in EAC meeting held on 24.6.2016 and EAC has advised to expedite Stage-I Forest Clearance for grant of EC.

5. Impact of Mining on Sathupalli Town

(1) Regarding effect of Mine on the Sathupalli Town, the User Agency got a detailed study conducted by Kakatiya University on the impact of mining and the Agency submitted report during Nov. 2016. Copies of the Study Report submitted to the Ministry, Regional Office and Sri Sandeep Kumar, AIGF (FC). The Report is perused and following are the important conclusions of the Report:

- The AAQ of PM (PM₁₀, PM_{2.5}) showed the mean concentrations of PM₁₀ to be from 61.0 ug/m³ (minimum) to 70.0 ug/m³ (maximum) whereas the PM_{2.5} ranged from 27.8 ug/m³ to 33.5 ug/m³ which are said to be below the standard permissible value.
 - Hardly there is any minor forest produce gathered by the residents of core zone in the proposed OCP. Hence, there is no direct impact on the livelihood of the local people if the forest land is diverted for mining.
 - Ground water level in & around Sathupalli town were also found within the range of normal fluctuations.
 - Ecological restoration of the overburdens and greening of habitats for normal and pre-existing environment were underlined as major mitigation strategies by the SCCL.
 - Finally, the study report, in general, has recommended the project activity of extracting coal from Kistaram OCP in the interest of energy needs of the Nation.
- (2) EPTRI Institute at Hyderabad regularly monitors the Air and Water parameters.
- (3) The TSPCB also, through their regional station at Kothagudem, monitors at regular intervals the Ambient Air Quality. There are wide fluctuations in the RSPM values around Sathupalli town because of mining.
- (4) The same may be appraised by the E.C. Appraisal Committee.

6. Verification of compliances in the field about earlier forest lands diverted

The Additional PCCF (Central), Regional Office, Chennai along with APCCF and Nodal Officer, Government of Telangana, the local forest officials such as Conservator of Forests, District Forest Officer along with SCCL officials verified the status of compliances in respect of the following diversions on 02.05.2018: -

6.1 261.31 Ha. diverted for GK OCP (Phase-I)

This land was initially diverted vide MoEF Lr.No.8-34,91-FC, dt.8/11.2.1993 for a period of 10 years and subsequently renewed vide MoEF Lr.No.8-117/2002-FC, dt.1.2.2010 for a further period of 20 years. Non-forest land for C.A. was handed over to Forest Dept. at Rasannagudem (V) of Paloncha Forest Division and SCCL deposited funds of Rs.30.90 lakhs required for C.A. at the time of original diversion. Out of 261.31 Ha., the User Agency has surrendered 100.0 Ha on 7.7.2010 to the Forest Department after re-stocking the same with suitable species.

The species planted in the area are like *Dendrocalamus strictus*, *Embllica officinalis*, *Azadirachta indica*, *Aegle marmelos*, *Hardwickia binata*, *Pongamia pinnata*, *Inga dulcii*, *Dalbergia latifolia*, *Holptelia integrifolia* etc. It is said that soil was inoculated with Trichoderma & Rhizobium culture before planting. Ficus species viz., *Ficus relegiosa*, *Ficus benghalensis*, etc. were also seen at regular intervals. The plantations have come up well and reached crop height of 4 – 6 meters and it resembles natural forest. To strengthen more, it is advised to create more water facilities and maintain them to attract wild life.

6.2 Diversion of 124 Ha. for GK OCP (Phase-II)

This area was diverted vide MoEFCC letter No.8-17/98-FC dt.8.2.1999 for a period of 20 years. For this Project also, C.A. land was handed over in Rasannagudem (V), Paloncha Forest Division and the SCCL had paid Rs.49.60 lakhs towards C.A. and Rs.3.66 lakhs for raising plantations in safety zone area. In this area, back filling is being done. Project Authorities have informed that after completion of back filling to the required height, this area will also be rehabilitated.

6.3 Diversion of 154.96 Ha. for GK OCP (Phase-III)

This area was diverted vide MoEF Lr.No.8-62/2005-FC, dt.9/15.7.2008 for a period of 20 years. Active mining is going on in this area. User Agency has complied with the conditions that are required to be complied by it like construction of boundary pillars, plantation on the dumping areas as well as back filled areas, toe wall, garland drains etc. and taken up reclamation of the area as per the approved EMP. Non-forest land for C.A. for this Project was handed over in Mulapet (V) of Srikakulam Division of erstwhile Andhra Pradesh State and handed over the land to Forest Dept. on 30.1.2001 and the User Agency has deposited Rs.82.08 lakhs on 18.4.2008 with the DFO, Srikakulam towards C.A. As per the QPR, an amount of Rs.18.965 lakh is spent on afforestation so far. Out of 154.96 ha. identified for CA, only 40 ha. was planted, leaving a balance area of 114.96 ha.

7. Inspection of CA raised with respect to forest land diverted earlier.

The team as above inspected the areas, as below on 02.05.2018.

7.1 In the evening, the team inspected the Non-forest lands (for compensatory afforestation) handed over at Rasannagudem(V) of Paloncha Division. In respect of 261.31 Ha., tree growth has come up well supported by natural growth. It is seen that out of Rs.30.90 lakh provided by the user agency, the forest department could utilize only Rs.2.760 lakh. It is informed that final notification is issued, but, boundary pillars are conspicuously absent. The forest department is advised to immediately take up boundary demarcation with pillars. If felt necessary, fencing also to prevent encroachment out of savings remained in the scheme. In 124.0 Ha. diverted under Phase-II, since the area is already having natural growth, Forest Department has informed that it has identified equivalent extent of degraded forest land at Manuguru and planted the same. Out of Rs.49.60 lakh provided by the user agency, the forest department could utilize Rs.2.845 lakh only.

As regards 154.96 Ha. diverted under Phase-III, since the Non-forest land for C.A. was identified in Srikakulam District of Erstwhile Andhra Pradesh, this could not be inspected. The same is verified from QPR and details are furnished above in para 6.3.

8 Inspection of reclamation work in earlier projects

The APCCF (Central), AIGF from the Ministry along with other officials inspected the areas, as below on 03.05.2018:

8.1 Diversion of 244.02 Ha. of JVR OCP-I

This land was diverted vide MoEF Lr.No.8-120/2003-FC, dt.2.2.2005. User Agency has complied with the conditions like handing over of Non-forest land for C.A., construction of boundary pillars around the diverted forest land and payment of C.A. charges etc. User Agency has informed that about 101 Ha. has been de-coaled of which 18 Ha. of Forest land was planted. In addition to this, about 76 Ha. non-forest land has been planted. The species planted in the area are

Dendrocalamus strictus, Hardwickia binata, Inga dulci, Pterocarpus santalinus, Ficus Species, Albezia odoratissima etc. The plantations have come up well and there is no damage to the adjacent forest.

8.2. Diversion of 136.5 Ha. for JVR OCP-I Expansion

This area has been diverted vide MoEF Lr.No.8-56/2008-FC, dt.3.7.2012. In this area, active mining is going on. The Non-forest land for C.A. has been given in Bhadrachalam (South) and Mahaboobnagar Districts and User Agency has paid the C.A. charges. Boundary pillars have also been constructed around the diverted forest land.

As the Sathupalli town is nearby to this Project, as decided by the Forest Department, User Agency has raised plantations in 60 Ha. of degraded forest land in between the Mine and Sathupalli town and another 15 Ha. has been proposed for plantations during the 2018 Season.

A good green belt is seen between the quarry and Sathupalli Town. User Agency has constructed 3 settling ponds, 22 cribs and 1.7 km. toe walls/retention walls and the same are being maintained.

9. Inspection of mine dump plantations in JVR OCP

To fulfill the conditions imposed by MOEFCC, while granting diversion permission, Afforestation on the dump slopes of external OB dump of JVROCP-I has been carried out in a phased manner.

List of OB plantations in JVROCP, Sathupalli since 2006-2010.

Year	Location	Species	Area in Ha	No. of seedlings planted	Survival in Nos.	Amount in Rs.	Legal status	Lat & Long
2006	JVROCP, OB	M	5.0	12500	11450	34870	SCCL	N 17.2087 E 80.8127
2007	JVROCP, OB	M	2.0	5700	4800	15888	SCCL	N 17.2078 E 80.8131
2008	JVROCP, OB	M	1.0	2600	1950	8525	SCCL	N 17.2089 E 80.8128
2009	JVROCP, OB	M	25.0	59000	46020	287043	SCCL	N 17.2043 E 80.7829
2010	JVROCP, OB	M	43.0	48907	39126	289555	SCCL	N 17.2083 E 80.7904
TOTAL			76.0	128707.0	103346.0	635881		

Planting on the External OB dumps was commenced from 2006 onwards. During 2006, since the dumps were of temporary nature only seed sowing with *Styloxanthu hamata* was taken up on the dump slopes, berms of the approach roads. In addition to the above *Acacia nilotica* (Babul) seed was dibbled all along the boundary of the project. Subsequently planting has been carried out on the external dumps, mounds and road berms during 2007, 2008, 2009 and 2010 in a phased manner. The total area planted up to 2010 is 76 Ha. and the total number of seedlings planted are 128707.

It is seen that a lot of local species viz., *Dendrocalamus strictus*, *Emblica officinalis*, *Ficus benghalensis*, *Albezia odoratissima*, *Pongamia pinnata*, *Cassia seamea*, *Azadirachta indica*, *Hardwickia binata*, *Ficus relegiosa*, *Ficus carica*, *Pterocarpus santalinus* etc., have been planted at an espacement of 2M x 2M.

Apart from planting of local species, soil binder like Agave suckers have been planted on the slopes in a staggered manner in order to check soil erosion. Further seeds of leguminous species viz., *Sesbania*, *Glyricidia*, *Subabul* and *Acacia nilotica* have been broad casted on the OB dumps to improve the nutrient status of the skeletal OB soil.

The SCCL has also taken up formation of garland drains and toe walls around the dump to reduce soil flow to outer areas. It is also reported that the eroded slopes of 30M decks have been revisited during November 2010 by planting Eucalyptus clones all along the gullies at a close espacement. The clones have established well and most of the gullies have been covered with greenery. The eroded slopes of 60M decks have been revisited during 2011 and 2012 with Bamboo and Eucalyptus clones, the seedlings have established well. It is said that the expenditure incurred towards raising and maintenance of the OB plantations on the external dump of JVROC-I Project Sathupalli from 2006 to 2011 was **Rs.6.36 lakhs** with an unit cost of **Rs.8600 per Ha**. The overall survival of the OB plantation raised at Sathupalli is more than 80%. It has been reported that more than 30 species of birds are visiting the area and became residents by nesting.

10. Compliances, as submitted by the user agency

The user agency has submitted detailed condition wise compliance against forest land diverted so far (copy enclosed for ready reference)

11. General compliances and non-compliances observed during monitoring by officials of Regional Office, Chennai.

11.1 Forest clearances

Certain non-compliances noted during monitoring are –

- (1) Safety zone maintenance not carried out in OCP-II (Phase III) in Kandepuram Ext.-I.
- (2) Safety zone maintenance not carried out in OCP-I in Ramagundem – II.
- (3) Subsidence study is not carried out regularly in Goleti-I underground mine block.
- (4) Subsidence study is not carried out regularly in Shantikeri – extension underground mine block.
- (5) Non-compliances from the side of forest department –
 - (a) The CA amount is not utilized fully. In fact, it is common observation in almost all the cases, which are followed up closely with forest department for effective utilization of CA amount.
 - (b) The deposition of Rs.35 crore in another account other than Ad-hoc CAMPA in FC related projects in irregular.

Environmental clearances

Certain non-compliances noticed during monitoring are –

- (1) The units have consistently exceeded the production than the consented quantity and, thus, change in the scope of the project.
- (2) Sewage treatment plants not being constructed in the townships.
- (3) Public Liability Insurance not obtained in some units.

12. Recommendations of the Team

Taking the overall requirement of the forest land, the proposal for diversion of 285.44 Ha. is recommended subject to the following conditions:

- a)** The Forest area 71.71 Ha. required for dumping should be rehabilitated and returned to the Forest Dept. within a maximum period of 10 years from its date of handing over to the User Agency.
- b)** As per Certificate under FRA, rights are recognized to 12 families involving 10.03 Ha. In addition to this, in the Non-forest land identified for dumping, there is one village called Jagannadhapuram where about 120 houses exist, who are also to be rehabilitated. The Officials of SCCL have informed that they have already identified land for shifting the villagers and the District Administration is taking action to rehabilitate them as per the Rehabilitation Policy of the State Govt. Hence, along with the rehabilitation of the villagers, the 12 families for whom rights under FRA are recognized are also to be rehabilitated before starting of mining operations in the area.
- (c)** The non-forest land identified for dump measures around 122 ha. may be handed over to forest department, once treated for future maintenance, so as to prevent land fragmentation there.
- (d)** The environmental conditions in and around Sathupalli town may be appraised by the E.C. Appraisal Committee separately.

In view of the above facts related to the proposal, it is proposed that proposal may be submitted to the forthcoming Forest Advisory Committee (FAC), in its meeting scheduled to be held on 19.06.2018.
