

**Sub: Diversion of 277.15 ha of forest land in favour of M/s Central Coalfield Limited for Rajrappa Open Cast Mine in Bokaro Forest Division in Bokaro District in the State of Jharkhand –rgarding.**

1. The State Government of Jharkhand vide their letter No. Vanbhumi-21/2013-1582/VP dated 24.03.2015 submitted the above mentioned proposal seeking prior approval of the Central Government under Section-2 of the Forest (Conservation) Act, 1980.
2. Extant proposal has been submitted in accordance with the directions contained in the MoEF&CC's advisory dated 1.02.2013 wherein MoEF&CC has instructed the all State Governments to obtain approval under the Forest (Conservation) Act, 1980, within a period of two years for the entire forest area involved in a mining lease. The PCCF in his letter dated 17.07.2015 has also reported that out of the total forest area of 336.58 ha involved in Block –II of the Rajrappa, instant proposal covers only 277.15 ha of forest land while proposal for balance area of 59.53 will be submitted by the project proponent at later stage.
3. It is also pertinent to mention here that Central Government has earlier accorded approval over 510.82 ha of forest land vide letter no. 8-105/2013-FC dated 15.03.2007 and the mining in the said approved area is ongoing. The PCCF in his letter dated 17.07.2015 has also reported that total mining lease area of Rajrappa is 3300.53 ha, forest area is 1298.39 ha. Entire project area is divided into five blocks. So far, approval under the Forest (Conservation) Act, 1980 has been obtained for 510.12 ha of forest land while adding up the area of instant proposal i.e. 277.15 ha, so far proposal for total area of 787.27 ha has been received for diversion under the Forest (Conservation) Act, 1980 while forest area of 511.12 ha is yet to be applied for prior approval of the Central Government under the Forest (Conservation) Act, 1980.
4. It is also pertinent to mention here that State Government did not report the compliance of conditions stipulated in the approval dated 15.03.2007 accorded for forest area of 510.12 ha.
5. The Regional Office, Ranchi submitted the site inspection report of the area proposed for diversion vides their letter no FP/JH/MIN/3613/2004/167 dated 6.11.2015.
6. The facts related to the proposal as contained in the State Government's letter dated 03.12.2014 and site inspection report of the Regional Office, Ranchi are given below in the form of fact sheet:

**FACT SHEET**

|    |                                        |                                                                                                                                         |
|----|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Name of the Proposal                   | Diversion of 277.15 ha of forest land for Rajrappa Open Cast Mine in favour of M/s Central Coalfield Limited in the State of Jharkhand. |
| 2. | Location<br>(i) State<br>(ii) District | Jharkhand<br>Bokaro                                                                                                                     |
| 3. | Details of the user agency             |                                                                                                                                         |

|              | Name of the user agency                                                                                                                                                                  | M/s Central Coalfield Limited – A subsidiary of Coal India Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |                 |              |                      |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|--------------|----------------------|
|              | Nature of the user agency                                                                                                                                                                | A Central Government Undertaking                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                 |              |                      |
| 4.           | Particulars of Forests:<br>(i) Name of Forest Division and Forest area involved.<br><br>(ii) Legal status/Sy.No.<br><br>(iii)Map                                                         | Bokaro Forest Division,<br>98.69 ha. P.F & 178.46 ha. G.M. Land recorded as Jangle-Jhari in Govt. records.<br><br>P.F & G.M. Land recorded as Jangle-Jhari in Govt. records.<br><br>SOI Toposheet – Not attached<br>Digital DGPS map- Not enclosed                                                                                                                                                                                                                                                                                                                                                                                                   |             |                 |              |                      |
| 5.           | Topography of the area                                                                                                                                                                   | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |                 |              |                      |
| 6.           | (i) Geology<br>(ii) Vulnerability to erosion                                                                                                                                             | -<br>An area of 227.15 ha land will be used for mining operation maintaining safety zone area so problem of soil erosion will be taken care of.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |                 |              |                      |
| 7.           | (i) Vegetation<br><br>(ii) Density<br><br>(iii) No. of trees to be felled                                                                                                                | The area proposed for diversion seems to be sparsely forested. General topography is undulating to ragged with low ridges and valleys. Surface is rocky with scattered trees. The forest is thin and density of vegetation appears to be less than 0.3 (SIR)<br><br>0.5 (Part.II)<br><br>Part-II mention that details of enumeration of trees are being enclosed. However, the Regional Office, Ranchi, in its site inspection report has mentioned that no. of trees enumerated comes to 14698. However no marking on the trees is found during inspection. Trees less than 30 cm girth are 9454 in number and more than 30 cms are 5244 in number. |             |                 |              |                      |
| 8.           | Whether area is significant from wildlife point of view                                                                                                                                  | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |                 |              |                      |
| 9.           | 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 | N.A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |                 |              |                      |
| 10.          | Whether any RET species of flora and fauna are found in the area. If so details thereof                                                                                                  | Wild animals commonly found in the area are as follows:-<br><table border="1"> <thead> <tr> <th>Common Name</th> <th>Zoological Name</th> </tr> </thead> <tbody> <tr> <td>Stiped hyena</td> <td><i>Hyaena Hyaena</i></td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                     | Common Name | Zoological Name | Stiped hyena | <i>Hyaena Hyaena</i> |
| Common Name  | Zoological Name                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |                 |              |                      |
| Stiped hyena | <i>Hyaena Hyaena</i>                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |                 |              |                      |

|     |                                                                                                                                                                                                                                                    |                                                                                                                                    |                            |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
|     |                                                                                                                                                                                                                                                    | Wild boar                                                                                                                          | <i>Sus scrofa</i>          |
|     |                                                                                                                                                                                                                                                    | Porcupine                                                                                                                          | <i>Hystrix indica</i>      |
|     |                                                                                                                                                                                                                                                    | Rhesus macaque                                                                                                                     | <i>Macaca mulatta</i>      |
|     |                                                                                                                                                                                                                                                    | Langur                                                                                                                             | <i>Presbytis entellus</i>  |
|     |                                                                                                                                                                                                                                                    | Jackal                                                                                                                             | <i>Canis aureus</i>        |
|     |                                                                                                                                                                                                                                                    | Fox                                                                                                                                | <i>Vulpes bengalensis</i>  |
|     |                                                                                                                                                                                                                                                    | Jungle cat                                                                                                                         | <i>Felis chaus</i>         |
|     |                                                                                                                                                                                                                                                    | Spotted deer                                                                                                                       | <i>Axis axis</i>           |
|     |                                                                                                                                                                                                                                                    | Hare                                                                                                                               | <i>Lepus nigricollis</i>   |
|     |                                                                                                                                                                                                                                                    | Chamelion                                                                                                                          | <i>Chamelion calcarata</i> |
|     |                                                                                                                                                                                                                                                    | Cobra                                                                                                                              | <i>Naja naja</i>           |
|     |                                                                                                                                                                                                                                                    | Ajagar                                                                                                                             | <i>Python molurus</i>      |
|     |                                                                                                                                                                                                                                                    | Dhanish                                                                                                                            | <i>Pylas mucosus</i>       |
| 11. | Approximate distance of the proposed site for diversion from boundary of forest.                                                                                                                                                                   | All the proposed areas are forest land.                                                                                            |                            |
| 12. | Whether any protected archaeological/ heritage site/defence establishment or any other important monuments is located in the area.                                                                                                                 | N.A                                                                                                                                |                            |
| 13. | 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. | No                                                                                                                                 |                            |
| 14. | 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.                               | The proposed area bears deposit of Coal and there is no alternative nearby.                                                        |                            |
| 15. | Whether clearance under the Environment (protection) Act, 1986 is required?                                                                                                                                                                        | Yes                                                                                                                                |                            |
| 16. | Compensatory Afforestation                                                                                                                                                                                                                         | Compensatory afforestation has been proposed over degraded forest land, twice in extent to the forest land proposed for diversion. |                            |
|     | (i) Details of non-forest area/degraded forest area                                                                                                                                                                                                | The area identified for compensatory afforestation is protected Forest of Bokaro Forest Division. These                            |                            |

|     |                                                                                                                                     |                                                                                                                                                                                                                                      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | identified for CA, its distance from adjoining forest, number of patches, size of each patches.                                     | forests are in Six patches. Size of each patch is given in the above mentioned list under Sl. No. 10.                                                                                                                                |
|     | (ii) Map showing non-forest/degraded forest area identified for CA and adjoining forest boundaries.                                 | Photocopy of Cadestral maps (16''-1 mile scale) of the area are attached. Howeve, Differential GPS map of the area identified for raising CA has not been submitted.                                                                 |
|     | (iii) Detailed CA scheme including species to be planted, implementing agency, time schedule, cost structure, etc.                  | Acacia, Chakundi, Gamhar, Sagwan, Shisham, Jamun, Kathal etc. will be planted by forest will be as mentioned in para.10.<br>However detailed CA scheme of CA has not been submitted by the State Government along with the proposal. |
|     | (iv) Total financial outlay for CA                                                                                                  | Rs. 5,47,55,119.00 is total outlay for compensatory afforestation. (Part.II)<br>Rs. 5.475 crores. (SIR)                                                                                                                              |
|     | (v) Certificate from the competent authority regarding suitability of the area identified for CA and from management point of view. | Part – II mention that the area identified for compensatory afforestation is suitable for plantation work and from management point of view.<br>Site suitability certificate has not been submitted along with the proposal.         |
| 17. | Catchment Area Treatment                                                                                                            | NA                                                                                                                                                                                                                                   |
| 18. | Rehabilitation of Oustees<br>a) No of families involved<br>b) Category of families<br>c) Details of rehabilitation plan             | 850 Approx<br>Being assessed by NGO<br>As per RR Policy of CIL (enclosed as annexure-10) pg-151/c                                                                                                                                    |
| 19. | Compliance of Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006                        | Not submitted.                                                                                                                                                                                                                       |
| 20. | Cost Benefit Ratio                                                                                                                  | 1:5.82                                                                                                                                                                                                                               |
| 21. | Total Cost of the Project                                                                                                           | <b>Rs. 510.85 crores. (RCE 2009)</b>                                                                                                                                                                                                 |
| 22. | Employment Potential                                                                                                                | Not mentioned                                                                                                                                                                                                                        |
|     | Detail of Mining lease                                                                                                              | Land has been acquiured under the CBA (A&D) Act, 1957 on 21.12.1966 (Pg 114/c)                                                                                                                                                       |
|     | Nature of mining                                                                                                                    | Open Cast                                                                                                                                                                                                                            |
|     | Total area of mining lease                                                                                                          | 3300.53 ha                                                                                                                                                                                                                           |
|     | Date of Grant of mining lease                                                                                                       | Not mentioned                                                                                                                                                                                                                        |
|     | Validity of mining lease                                                                                                            | Not mentioend                                                                                                                                                                                                                        |

|     |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                               |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | Details of earlier approvals                                                                                                                                                                                                                                                                                                                      | Area of Block –I involving area of 51.12 ha approved on 15.03.2007                                                                                                                                            |
|     | Mine Plan with Progressive Mine Closure Plan                                                                                                                                                                                                                                                                                                      | Enclosed.                                                                                                                                                                                                     |
| 23. | Recommendation<br>i. DFO<br>ii. CCF<br>iii. Nodal Officer<br>iv SG                                                                                                                                                                                                                                                                                | Recommended (pg-98-100/c)<br>Recommended (pg-96-97/c)<br>Recommended (pg-95/c)<br>Recommended (pg-94/c)                                                                                                       |
| 24. | District Profile<br>(i) Total Geographical area of the district<br>(ii) Total Forest area/Divisional Forest area<br>(iii) Total area diverted since 1980<br>(iv) Total CA stipulated since 1980<br>a. Forest land including penal CA<br>b. Non Forest Land.<br>(v) Progress of Compensatory Afforestation<br>a. Forest land<br>b. Non Forest land | 3124.80 Km <sup>2</sup> .<br>543.93 Km <sup>2</sup> .<br>1577.559 ha. (Forest area 1079.971Ha., G.M. Jungle Jhari 497.588 Ha.) No. of cases-23<br>3,533.30 ha<br>114.29 Ha<br>2429.94 Ha<br>2429.94 Ha<br>Nil |

The project proponent has not submitted undertaking to bear the cost of CA and NPV.

The State Government has recommended the proposal subject to general and standard conditions.

**SITE INSPECTION REPORT IN RESPECT OF DIVERSION OF 277.15 HA OF FOREST LAND FOR RAJRAPPA OCP IN FAVOUR OF M/s CENTRAL COALFIELDS LTD IN BOKARO DISTRICT OF JHARKHAND.**

**SITE INSPECTION REPORT, REGIONAL OFFICE, RANCHI**

**Date of Inspection:** 3<sup>rd</sup> November, 2015

The CF (Central) vide his letter no. FP/JH/MN/3613/2004/167 dated 06.11.2015 submitted the site inspection report to this Ministry. Facts reported by the Regional Office in its site inspection report are given as under:

As reported by the Divisional Forest Officer, Bokaro Forest Division, Assistant Conservator of Forest, Bokaro Forest Division, user agency represented by GM, Project Officer, Staff Officer, Manager of Block II, Senior Manager of CCL, Rajrappa group of mines, Range Forest Officer of Gumia and other field staff.

1. The legal status of the forest land is Protected Forests (Notified) and Jungle Jhari.
2. Item-wise break-up details of the forest land proposed for diversion.

The item-wise break-up details of the forest land is as follows:

| Division | P.F. area (in ha) | Jungle Jhari (in ha) | Total (ha) |
|----------|-------------------|----------------------|------------|
| Bokaro   | 98.69             | 178.46               | 277.15     |

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

Not reported.

**1. Total cost of the project at present rates is Rs.51.0.85 crores,(RCE 2009)**

With regards to the **Wildlife in the area the Regional Office has reported that** forest area proposed for diversion is important from wildlife point of view or not: No rare/endangered species of fauna are found in the area. Proposed area for diversion does not form a part of National Park, Wildlife Sanctuary and Biosphere/Tiger Reserve. Since the area of forest land diverted is large i.e.277.15 ha, it will definitely show significant impact on the flora and fauna of the area.

2. The Regional Office has further reported that **density of vegetation appears to be less than 0.3** The area proposed for diversion seems to be sparsely forested. General topography is undulating to rugged with low ridges and valleys. Surface is rocky with scattered trees. The forest is thin and density of vegetation appears to be less than 0.3

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

The no. of trees enumerated comes to 14698. However no marking on the trees is found during inspection. Trees less than 30 cm girth are 9454 in number and more than 30 cms are 5244 in number.

**(b) Effect of removal of trees on the general ecosystem in the area:**

It will adversely affect the general eco-system of the area.

**8. Compensatory afforestation:** As reported, DFO Bokaro has identified 554.30 ha of degraded forest land along forest boundary in 6 patches.

- (a) For compensatory afforestation is suitable from plantation and management point of view Suitable as reported by DFO Bokaro

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

No information is available in records

- (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:

DFO, Bokaro has identified degraded forest land for raising compensatory afforestation in 6 patches.

(e) Map with details: Enclosed as Annexure.

(f) Total financial outlay: Rs.5.475 crores.

**9. With regards to the violation of Forest (Conservation) Act 1980, the Regional Office has reported that no violation of has been committed.**

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

As reported around 850 families in mining area will be rehabilitated. Detailed resettlement and rehabilitation plan has been prepared and submitted.

**11. Reclamation plan:**

Submitted by the user agency and the same is enclosed.

**12. Details on catchment and command area under the project: Not applicable. Catchment area treatment plan to prevent siltation of reservoir:**

Not applicable.

**13. Cost benefit ratio:**

As reported it is 1: 5.82 which is very low.

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

Recommended by the PCCF / State Government.

**15. 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:**

Annexed separately.

**16. Utility of the project:**

Rajrappa project (Phase II) is one of the largest semi coking mines of Coal India Ltd which lies in Ramgarh Coalfields in Bokaro dist of Jharkhand state. It has good quality of medium coking coal which is a substitute of imported coal used by steel plants. Apart from this, project will

provide employment opportunity to people, help in development of local industry, improve the quality of life of the people and help in upliftment of social and educational standards of the people.

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

Details not available in the records.

**(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:**

Not reported.

**18. Situation with respect to any Protected Area:**

Proposed area for diversion does not form a part of National Park. Wildlife Sanctuary, Biosphere/Tiger Reserve.

**19. Any other information relating to the project:**

The proposed area is just opposite to phase I of Rajrappa Project-I. During the site inspection it was observed that no work has been started by the user agency and the whole area was demarcated on the ground. The GPS coordinates of some of the points were selected randomly and were verified on the ground by handheld GPS instruments and found to be in order. However, no RCC boundary pillars were found during inspection. It was observed that in the area proposed for diversion which is mostly in the category of Jungle Jhari, rampant illegal mining by the local villagers is taking place. No tree marking was seen on the enumerated trees in the project area. Since the project operates in Open Cast method, top soil management is a must and the user agency is advised to prepare top soil management plan.

The user agency may also explore the possibility of underground mining instead of open cast mining. Since the project area is near Damodar river enough precautions should be taken for not polluting the river. The user agency shall have to take all possible precautions for protection of environment and control of pollution while operating in the area.

**RECOMMENDATIONS OF ADDL. PRINCIPAL CHIEF CONSERVATOR OF FORESTS (CENTRAL)**



- i. On perusal of records and Site Inspection Report of DCF the following observations are made: The item-wise break-up of the forest land is as follows:

| Division | P.F. area (in ha) | Jungle Jhari (in ha) | Total (ha) |
|----------|-------------------|----------------------|------------|
| Bokaro   | 98.69             | 178.46               | 277.15     |

- ii. The density of vegetation has been reported to be less than 0.3 in Bokaro Forest Division and the area appears to be sparsely vegetated.
- iii. Total 14,698 No. of trees are proposed to be felled, out of which 9,454 trees are below 30 cm girth and 5,244 trees are above 30 cm girth.
- iv. Diversion of such a large patch of forest land (277.15 ha) will definitely have adverse impact on the flora and fauna of the area.
- v. The Cost Benefit Ratio is 1: 5.82, which is very less.
- vi. Illegal mining is also seen in Jungle Jhari area.

Keeping in view the fact that the density of forests is low and the area is sparsely vegetated, the Addl. PCCF (central) has recommended the proposal for diversion of forest land. The Addl. PCCF (Central) has also recommended that possibility of underground mining should also be explored.

In view of the above, it is proposed that proposal may be submitted to the FAC for its consideration in its forthcoming meeting scheduled to be held on 24.11.2015

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