

**SITE INSPECTION REPORT**

**PROPOSAL UNDER SECTION 2 OF FOREST (CONSERVATION) ACT 1980 FOR DIVERSION OF 323.49 HA OF FOREST LAND FOR PURANDIH OCP MINE IN FAVOUR OF CENTRAL COALFIELDS LIMITED IN CHATRA DISTRICT, JHARKHAND**

1. The site inspection in respect of the project was done on 24.6. 2019 by the Addl. Director General (C) along with Dr.T.H.Mahato, Scientist – C and Dr. Surojit Panda, Technical Associate (GIS, DSS), Regional Office.

The General Manager NK Area, CCL (Shri M.K.Rao), Manager, Purandih OCP (Shri Sanjeev Kumar Thakur), Area Survey Officers (Shri A.K.Patra, Sri S K Sinha) participated in the site visit and gave inputs regarding the project related details and technical aspects and the forests and wildlife in the concerned area. The proposal details have also been discussed with the DFO, Chatra South Forest Division.

2. The salient details of forest land, relevant project related facts and observations are as follows:

1.	<p><b>Legal status of the forest land proposed for diversion:</b>                  Protected Forests notified under Indian Forest Act, 1927 - 170.89 ha                  Gairmajarua Jungle Jhari Forests (GMJJF) - 152.60 ha                  Non-Forest land required - 509.45* ha                  Total area under lease - 832.94* ha                  * Revised to 428.25 ha non-forest land and 751.74 ha aggregate area which relates to leasehold area of this project as against total acquired area.</p>																																		
2.	<p><b>Item-wise break-up details of the forest land proposed for diversion.</b>                  The item-wise break-up of the forest land and non-forest land are follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Sl No.</th> <th style="width: 45%;">Component</th> <th style="width: 20%;">Forest Land (ha)</th> <th style="width: 30%;">Non-Forest Land (ha)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Quarry (mining work)</td> <td style="text-align: center;">290.33</td> <td style="text-align: center;">352.05</td> </tr> <tr> <td style="text-align: center;">2</td> <td>OB Dum</td> <td style="text-align: center;">22.19</td> <td style="text-align: center;">28.00</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Infrastructure, office, workshop, roads etc.</td> <td style="text-align: center;">1.8</td> <td style="text-align: center;">21.2</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Embankment</td> <td style="text-align: center;">6.03</td> <td style="text-align: center;">19.75</td> </tr> <tr> <td style="text-align: center;">5</td> <td>Green Belt</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;">7.25</td> </tr> <tr> <td style="text-align: center;">6</td> <td>Safety Zone</td> <td style="text-align: center;">3.14</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td colspan="2" style="text-align: right;"><b>Total</b></td> <td style="text-align: center;">323.49</td> <td style="text-align: center;">428.25</td> </tr> </tbody> </table>			Sl No.	Component	Forest Land (ha)	Non-Forest Land (ha)	1	Quarry (mining work)	290.33	352.05	2	OB Dum	22.19	28.00	3	Infrastructure, office, workshop, roads etc.	1.8	21.2	4	Embankment	6.03	19.75	5	Green Belt	0.00	7.25	6	Safety Zone	3.14	0.00	<b>Total</b>		323.49	428.25
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3.	<p><b>Whether proposal involves any construction of buildings (including residential) or not. If yes, details thereof:</b>                  Except for miniscule area for operational buildings other than residential building included in item 3 of table here above, the facilities and services requiring major buildings including residential buildings in forest land are not involved in this proposal, as these facilities and services are to be operated/utilized in pre-existing buildings of North Karanpura Area Establishment (set up prior to 1980) and additional requirement 0.54 ha is located in non-forest land.</p>																																		

4.	<p><b>Total cost of the project at present rates:</b> The cost of project is Rs.210.98 crores. (recorded as 21.098 Cr in Part I of FC application due to typographical error).</p>																								
5.	<p><b>Wildlife:</b> <b>Whether forest area proposed for diversion is important from wildlife point of view:</b> The proposed forest area for diversion does not form a part of National Park, Wildlife Sanctuary and Biosphere/Tiger Reserve. No rare/endangered species of fauna are found in the area. As per site observation, the areas (6 patches) to be diverted are adjacent or in the vicinity of broken coal mine areas (aggregate area 113 ha) working and exhausted in non-forest areas and these are not significant from wildlife point of view.</p>																								
6.	<p><b>Vegetation:</b> The forests consist of tropical deciduous Sal forests (typically dominant in Chotanagpur plateau region of Jharkhand) with tree cover dominated by Sal(Sakhua) interspersed with associate species (e.g. Asan, Chilbil, Sidha, Karma, Kahua, Dhautha, Kend, Piar, Mahua, Palas, Jamun) and small pockets Mahua and Palash. The enumeration list of trees also confirms the domination of Sal in the forest plots to be diverted. The density of vegetation is reported 0.4 which pertains to the tract in context, and a number of patches in the area proposed for diversion have density less than 0.4 also.</p> <p><b>Total number of trees to be felled.</b> As per enumeration list: 6789; 5915 &gt; 60 cm girth, 874 &lt;or=60 cm girth</p> <p><b>Effect of removal of trees on the general ecosystem in the area:</b> Removal of trees for <i>open cast mining</i> will definitely have adverse effects on the general ecosystem of the area with loss of tree and vegetation cover over 300+ hectares with negative implications for moisture regime, microclimate, soil conditions and regeneration of vegetation. These could be recompensed with progressive reclamation and well planned and technically sound re-vegetation of the mined over areas and complete eco-restoration after closure of the mine.</p>																								
7.	<p><b>Background note on the proposal:</b> Purandih OCP is located in <i>North-Karanpura Coal Block Area of CCL</i> in Chatra district. Purandih OCP is surrounded by Damodar River in the western and southern sides, Ashoka OCP in the northern side and Benti Coal Block in eastern side. Village wise details of the PF and GMJJ land is given as below:</p> <table border="1"> <thead> <tr> <th>Village</th> <th>PF (ha)</th> <th>GMJJ (ha)</th> <th>Total (ha)</th> </tr> </thead> <tbody> <tr> <td>Henzda</td> <td>98.94</td> <td>105.01</td> <td>203.95</td> </tr> <tr> <td>Kutki</td> <td>1.73</td> <td>37.41</td> <td>39.14</td> </tr> <tr> <td>Dembua</td> <td>10.73</td> <td>10.18</td> <td>20.91</td> </tr> <tr> <td>Koilara</td> <td>59.49</td> <td>0</td> <td>59.49</td> </tr> <tr> <td>Total</td> <td>170.89</td> <td>152.6</td> <td>323.49</td> </tr> </tbody> </table>	Village	PF (ha)	GMJJ (ha)	Total (ha)	Henzda	98.94	105.01	203.95	Kutki	1.73	37.41	39.14	Dembua	10.73	10.18	20.91	Koilara	59.49	0	59.49	Total	170.89	152.6	323.49
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	<p>The Purnadih project commenced in 2009. Current annual capacity of this mine is 3.00 million tonnes per year with EC for maximum 3.45 mt/yr. Of the estimated reserves of 55 mt, 15.81 mt have been exhausted in the currently open areas and reaching the limits of allotted areas; for continuing the production, it is necessary to open fresh forest areas. With permission for fresh areas, the coal mine is expected to last another 20+ years.</p>																																																																											
<p>8. <b>Compensatory afforestation:</b></p>	<p>Compensatory afforestation has been proposed over 650 ha degraded forest land in 11 patches, details are as follows:</p> <table border="1"> <thead> <tr> <th>Sl. No.</th> <th>Name of Site</th> <th>Thana &amp; Thana No.</th> <th>Gross Area (ha)</th> <th>Net Area (ha)</th> </tr> </thead> <tbody> <tr><td>1</td><td>Salgi</td><td>Simaria-95</td><td>152.00</td><td>55.00</td></tr> <tr><td>2</td><td>Bukru</td><td>Tandwa-08</td><td>92.46</td><td>60.00</td></tr> <tr><td>3</td><td>Pokla</td><td>Tandwa-34</td><td>120.00</td><td>70.00</td></tr> <tr><td>4</td><td>Balia</td><td>Itkhor-211</td><td>121.19</td><td>70.00</td></tr> <tr><td>5</td><td>Siria</td><td>Itkhor-113</td><td>62.76</td><td>35.00</td></tr> <tr><td>6</td><td>Gopda</td><td>Tandwa-39</td><td>110.97</td><td>70.00</td></tr> <tr><td>7</td><td>Lohra</td><td>Tandwa-14</td><td>96.97</td><td>60.00</td></tr> <tr><td>8</td><td>Lohra</td><td>Tandwa-14</td><td>13.59</td><td>10.00</td></tr> <tr><td>9</td><td>Nawadih Damaul</td><td>Gidhour-52</td><td>81.77</td><td>50.00</td></tr> <tr><td>10</td><td>Ramtunda</td><td>Chatra-138</td><td>93.55</td><td>70.00</td></tr> <tr><td>11</td><td>Bhabney &amp; Sajna</td><td>Chatra-173</td><td>22.52</td><td>15.00</td></tr> <tr><td>12</td><td>Bhabney &amp; Sajna</td><td>Chatra-191</td><td>28.03</td><td>25.00</td></tr> <tr><td>13</td><td>Chatra &amp; Pakaria</td><td>Chatra-175 &amp; 174</td><td>95.46</td><td>60.00</td></tr> <tr> <td colspan="4" style="text-align: right;">Total</td> <td>650.00</td> </tr> </tbody> </table>	Sl. No.	Name of Site	Thana & Thana No.	Gross Area (ha)	Net Area (ha)	1	Salgi	Simaria-95	152.00	55.00	2	Bukru	Tandwa-08	92.46	60.00	3	Pokla	Tandwa-34	120.00	70.00	4	Balia	Itkhor-211	121.19	70.00	5	Siria	Itkhor-113	62.76	35.00	6	Gopda	Tandwa-39	110.97	70.00	7	Lohra	Tandwa-14	96.97	60.00	8	Lohra	Tandwa-14	13.59	10.00	9	Nawadih Damaul	Gidhour-52	81.77	50.00	10	Ramtunda	Chatra-138	93.55	70.00	11	Bhabney & Sajna	Chatra-173	22.52	15.00	12	Bhabney & Sajna	Chatra-191	28.03	25.00	13	Chatra & Pakaria	Chatra-175 & 174	95.46	60.00	Total				650.00
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<p>(a)</p> <p>(b)</p> <p>(c)</p> <p>(d)</p> <p>(e)</p> <p>(f)</p>	<p>Whether land for compensatory afforestation is suitable from plantation and management point of view or not: Suitable as reported by DFO, Chatra South F. Div. Division.</p> <p>Whether land for compensatory afforestation is free from encroachment/other encumbrances: Not Reported.</p> <p>Whether land for compensatory afforestation is important from Religious/Archaeological point of view: Not reported.</p> <p>Land identified for raising compensatory afforestation is in how many patches, whether patches are compact or not: In 11 patches. Of these 9 patches are compact and 2 patches enclose non-forest areas.</p> <p>Map with details: Enclosed as Annexure</p> <p>Total financial outlay: Enclosed as Annexure</p>																																																																											

<p>9.</p>	<p><b>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:</b></p> <p>Out of total 152.60 ha GMJJ forest land, the User Agency has broken and partly quarried in 112.91 ha of GMJJ forest land from 2012 onwards without prior permission of the Central Government in violation of Forest (Conservation) Act, 1980.</p> <p>The User Agency (CCL) has claimed that the land under violation in question was acquired under CBA Act 1957 vide SO No. 1501 dated 14.05.1990. The land was already settled in favour of villagers/raiyats between 1939-45 by the then Zamindars and also during 1980s by State Government. The land including GMK JJ was utilized by raiyats for agriculture etc. which was construed as converted tenancy land. After acquisition under CBA Act, 1957 and providing benefits to raiyats as per applicable policy and rules, mining was started by CCL in this patch in 2012. The incidence of violation was taken into cognizance after this matter of violation in 2014-15 was reported in a communication by Deputy Commissioner, Chatra in September 2015 and Divisional Forest Officer, Chatra South Forest Division requesting Dy Commissioner for action against the illegal mining. Thence upon the mining in the area under violation has been suspended and the current mining operations are being carried out in non-forest areas aggregating 162 ha.</p> <p>In view of the facts and circumstances of the stated incidence of violation of F(C) Act 1980, and the contentions in defense by CCL, that the land having been acquired under CBA Act 1957 were purportedly settled with <i>raiyats</i> and acquired the status of tencancy non-forest land with mining done after payment of compensation etc. to the <i>raiyats</i>, the case may be considered for approval with imposition of penalty, as deemed fit.</p>
<p>10.</p>	<p><b>Whether proposal involves rehabilitation of displaced persons. If yes, whether rehabilitation plan has been prepared by the State Government or not :</b></p> <p>182 no of families (Scheduled Caste Family - 108, Schedule Tribes Family - 74) are displaced for the project. Copy of Rehabilitation and Resettlement Plan is enclosed.</p>
<p>11.</p>	<p><b>Reclamation plan:</b> Not applicable. <b>Details &amp; Financial allocation:</b> Not applicable</p>
<p>12.</p>	<p><b>Details on catchment and command area under the project:</b> Not applicable. <b>Catchment area treatment plan to prevent siltation of reservoir:</b> Not applicable.</p>
<p>13.</p>	<p><b>Cost benefit ratio:</b> The cost-benefit ratio is 1:15.39 (As per Ministry's guidelines dated 1.08.2017).</p>
<p>14.</p>	<p><b>Recommendations of the Principal Chief Conservator of Forests/State Government:</b> Recommended by the PCCF / State Government with penal provision for violation incurred in the proposed forest land over 101.73 ha of GMJJF (actual rectified figure is 112.91 ha) without obtaining prior approval from the Central Government under Forest (Conservation) Act, 1980.</p>

15.	<p><b>Recommendation of Addl. DG (Central) along with detailed reasons:</b>  The Purnadih Coal Mine Project is part of approved coal production plan of CCL from the North Karnapura Coalfield deposits. The currently broken/open areas have almost reached exhaustion of coal deposits, and for sustaining the production and efficient utilization of the remaining 2/3<sup>rd</sup> quantity of coal deposit in this already opened mine, the expansion in fresh/unbroken forest area and extension of mining in broken area under stated violation of FC Act is unavoidable. As such the proposal is recommended for approval under Forest (Conservation) Act 1980 with imposition of penalty, as deemed fair under the circumstances and considering the defense of CCL in case of violation in respect of (112.91 ha) ha of the 152.60 ha. GMJJ forest areas included in the aggregate 323.49 ha. of forest area applied for diversion.</p>
16.	<p><b>Addl. DG (Central) shall give detailed comments on whether there are any alternative routes / alignment for locating the project on the non-forest land:</b>  This coal mining proposal being part of North Karanpura Coalfield Area deposit, is site specific proposal and the exploration or evaluation of alternate site etc. is not feasible or relevant. The decision to open new areas is factored by production plans of CCL, in the context of coal production targets and phasing of mines etc. in conformity with national priorities and contingencies.</p>
17.	<p><b>Utility of the project:</b>  The project's utility is factored by national plan of coal production mainly for use in power generation through coal-fired thermal power plants along with other uses. CCL, as a subsidiary of Coal India Limited, a Central Government undertaking aligns its production targets and phasing based on current scenario of ratio of coal-fired thermal power in the national power grid mix from different types of sources. Besides, the operation of this coalmine is stated as per Project Report to generate total 523 no of permanent employment and temporary 13075 person-days on an annual basis.</p>
18.	<p><b>Numbers of Scheduled Caste / Scheduled Tribes to be benefited by the project:</b>  Not Reported.</p>
(a)	<p><b>Whether land being diverted has any socio-cultural/ religious value:</b> Not reported.</p>
(b)	<p><b>Whether any sacred grove or very old growth trees/forests exist in the areas proposed for diversion:</b> Not reported.</p>
(c)	<p><b>Whether the land under diversion forms part of any unique eco-system:</b> Not reported.</p>
19.	<p><b>Situation with respect to any Protected Area:</b>  The forest area proposed for diversion is not forms part of any National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Corridor etc.</p>

20. Any other information relating to the project:

- 1) The DFO has also pointed out in his note of recommendation that there are outstanding compensatory and penal levies in respect of other CCL projects in Chatra South Forest Division. As there are 5 current running large projects of CCL in Chatra South Forest Division, and about 60 projects in Jharkhand state, the matter of outstanding recoveries on various counts should be resolved / reconciled in due course and it has been informed the process to be monitored by State Nodal Officer (FC Act), Jharkhand/SFD, Jharkhand.
- 2) The *reclamation and eco-restoration* component of CCL needs transformative reforms in terms of *technology and process*, and *management or administrative regime with professionally sound engagement on sustained basis* to enhance the success and quality of eco-restoration efforts yielding the best feasible end landform in respect of outcomes for soil, water and biodiversity characteristics. The works of reclamation, eco-restoration and green belt creation undertaken so far in this project are deficient with considerable scope for improvement. Although the Purnadih OCP project has a adequate Reclamation and Closure Plan with Eco-restoration component, the North Karanpura Coalfield management should work towards upgrading the eco-restoration component as an integral and equally significant part of mining project for Purnadih OCP and other projects in hand or in the pipeline. In this context, the following areas of improvement are suggested:
  - i. Provision of core dedicated work force for Eco-restoration with long-term engagement and with appropriate resources and infrastructure for such long term mining operations in hand and those to be taken up.
  - ii. The workforce to be equipped with in-house competence, expertise and capability for self-enhancement in techniques in respect of site specific customization and innovation and learning from some of their own best works and those of others.
  - iii. Project wise engagement of consultancy services and collaborative R & D association with expert institutions / organizations in the field of eco-restoration and related subject specializations.

*Bharat* 8/7/19  
(Bharat Jyoti)

Dy. Director General (Central)