



भारत सरकार / Government of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
एकीकृत क्षेत्रीय कार्यालय/Integrated Regional Office

पता: द्वितीय तल, झारखण्ड राज्य आवास बोर्ड मुख्यालय, हरमू चौक, राँची, झारखण्ड - 834002
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सत्यमेव जयते

मिसिल सं० FP/JH/min/38798/2019/717

दिनांक 25.11.2022

सेवा में,

श्री चरणजीत सिंह,
वैज्ञानिक 'डी' (FC Division)
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,
इंदिरा पर्यावरण भवन, अलीगंज,
जोरबाग रोड, नई दिल्ली-110003

विषय: पकरी-बरवाडीह कोल माईन नॉर्थ ईस्ट प्रोजेक्ट, मेसर्स नेशल थर्मल पावर कार्पोरेशन लिमिटेड जिला हजारीबाग स्थित का स्थल निरीक्षण एकीकृत क्षेत्रीय कार्यालय, राँची द्वारा किए जाने के संबंध में।


सन्दर्भ: पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार के पत्र संख्या 8-56/2009-एफ.सी- (vol) दिनांक 07/07/2022

महोदय,

उपरोक्त विषयान्तर्गत श्रीमान् के संदर्भित पत्र के आलोक में परियोजना से संबंधित वांछित स्थल निरीक्षण किया जाकर तैयार प्रतिवेदन को मार्गदर्शिका के पारा 1-21-(III) के आलोक में विभागाध्यक्ष के अनुमोदनोपरांत क्षेत्रीय सशक्त समिति के समक्ष प्रस्तुत करा उनकी संस्तुति के साथ संलग्न प्रेषित की जा रही है।

संलग्न: यथा उक्त

भवदीय


25/11/22
(शशि शकर)

सहायक वन महानिरीक्षक
एकीकृत क्षेत्रीय कार्यालय, राँची

Site Inspection Report for Pakri-Barwadih Coal Block of M/s NTPC.

An application for diversion of 331.198 Ha of Forest land in Barkagaon Range of Hazaribagh West Forest Division is under consideration as proposal no. FP/JH/Min/38798/2019. This proposal is for coal-mining by M/s NTPC within its lease area of 4695 Ha. A Forest area of 1026.438 Ha within the lease has already been diverted (Proposal No. FP/JH/Min/693/2009; Stage-II vide letter dated 17/9/2010) and mining is happening there since 2016.

The extant case is proposed North-West extension of the existing quarry.

According to the FC Rules, the Integrated Regional Office, Ranchi was requested by ministry to vide its letters dated 23/2/2022 & 7/7/2022 to inspect the lease area, proposed diversion area & CA area involved in the proposal. Ministry also asked IRO Ranchi to assess the status of compliance of conditions stipulated in the approval dated 17/9/2010, granted towards the area of 1026.438 Ha in light of para 1.21 (iii) of the FCA Handbook.

Accordingly, the team of IRO Ranchi, comprising its AIG, visited the site on 28/10/2022.

During the site inspection among others following representatives of state Forest Department and project proponents were present along with the visiting team: -

1. Shri R.N. Mishra, DFO Hazaribagh West
2. Shri Shailendra Kumar, IFS, Hazaribagh West
3. Shri Satyam Srivastava, Head of Project, NTPC
4. Shri Birendra Kumar, AGM (Environment), NTPC

The site inspection was preceded by an on-site presentation made by NTPC officials to give an overview of the extant fresh proposal and the status of S-II compliance towards already diverted 1026.438 Ha forest area.

FC Proposal No. FP/JH/Min/38798/2019 for diversion of 331.198 Ha forest area towards Pakri-Barwadih (North-West) Coal Mining Project: -

In this fresh proposal for diversion of 331.198 Ha, the proposed forest-area is located in the North-Western side of the already diverted area (1026.438 Ha; S-II vide letter dated 17/9/2010, as depicted in the following imagery: -



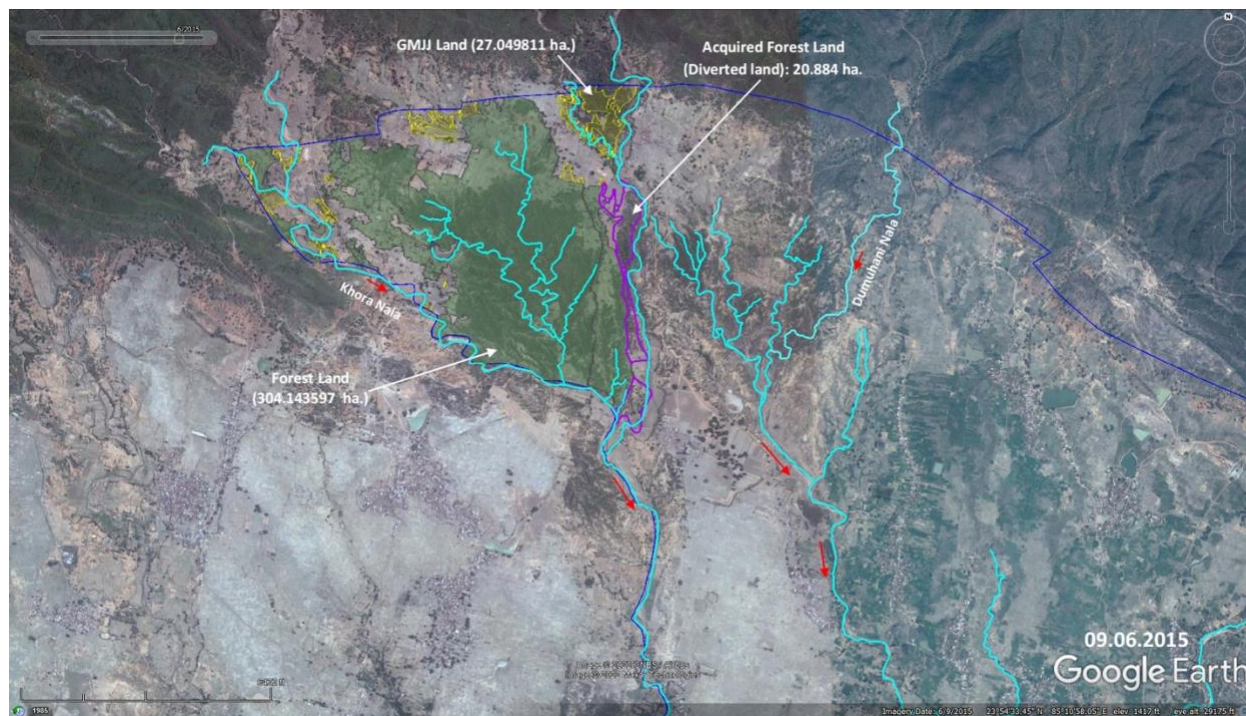
It is seen that the proposed forest area is contiguous to the already diverted area. The area has fairly good vegetative density and undulating terrain. The forest officials present there apprised that occasional movement of elephant herds too is reported in the area.



The proposed area (331.198 ha; FP/JH/Min/38798/2019) is separated from the existing mines (1026.438 Ha area; FP/JH/MIN/693/2009) by a

tributary of the Khora Nala which constitutes the western boundary of the lease area (as depicted below).

The total lease hold of the North-West Project is 485.16 Ha which includes 113.56 Ha of tenancy land, 19.71 Ha of GM Land and 351.189 Ha Forest land which includes 20.692 Ha already diverted forest land (from 1026.438 Ha) apart from the applied 331.198 Ha forest land.



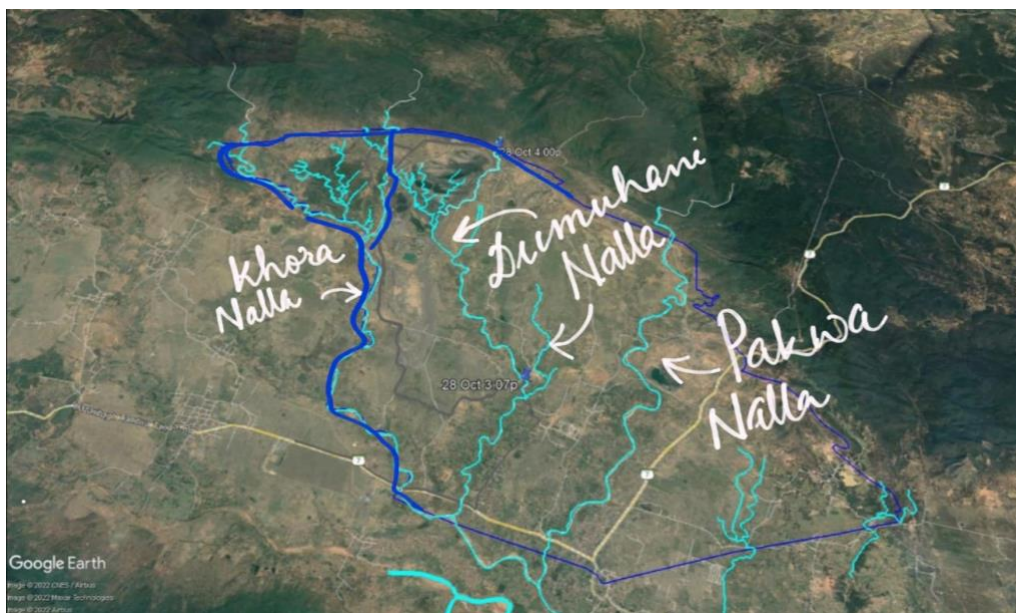
The total coal bearing area is 471.06 Ha which has mineable reserve of 138.96 MT. with a production capacity of 3 MTPA, the total project life is planned for 52 years.

The project proponent has emphasized that the 15 mtr. safety zone at the boundary of proposed and existing area has been incorporated in the mining plan and therefore 33.18 MT of mineral reserve shall be kept as Barrier & Batter. The trapezoid form of the earth below the undisturbed surface accounts for such staggering occluded minable mineral resource – about 30% of total. Upon further enquiry on the matter, the representatives of user agency apprised that this trapped mineral shall be mined in 2nd phase of project – some 40 years later.

User agency, in attempt to capitalize the discussion, tried to justify the violation of condition No. 8 imposed in final approval of 1026 Ha area.

The condition No. 8 of the final approval dated 17/09/2010 for 1026.438 Ha (adjacent forest area, to same user agency) demanded, “*User agency will take up programme for at least 50m greenbelt along the sides of the Pakwa Nallah and Dumuhani Nallah from the initial years under the supervision of the State Forest Department.*”

The situation of Pakwa Nallah & Dumuhani Nalla (Khora Nalla too) is shown in the imagery below.



User agency tried to explain that since Dumuhani Nalla was running almost through the middle of the project area, leaving 50m belts on both sides of it would have resulted in unviable mining operation as massive reserve would have left unutilized. Therefore, they resorted to mining there too.

The inspecting team of IRO asked the project proponent that if such massive was the implication why appropriate representation in time was not made by user agency considering the fact that conditions under S-II were issued in 2010 whereas actual mining started six years later in 2016.

Situation portray least botheration of user agency towards the compliance of conditions mentioned in final approval of Forest clearance while implementing the project.

Further project proponent apprised that Dumuhani nalla was to be diverted as per the approved mine plan (Chapter 5.2.11) of CWPRS Pune. Even then U/A gave consent to develop greenbelt around it for sake of processing hurried Forest clearances. (Stage-I issued on 11/5/2010, S-II on 17/9/2010).

They also informed that user agency has procured required permission to divert the Nallah from water Resource Department, Govt. of Jharkhand vide letter dated 19.3.2013. State Forest Department officials were asked to clarify whether or not the water Resources department is empowered to accord such permission in forest area or not; the officials responded in negative.

In such a scenario it is evident that user agency's prime concern was revenue generation only with least care towards the compliance of conditions by which the very approval of mining in the area was conveyed.

The drainage system of Dumuhani Nalla prior to mining operation commencement (in 2015) and post mining operation (2019) are shown in the below two satellite imageries.



From the two satellite imagers it is quite clear that the mining operation has destroyed the very region from where the Dumuhani Nalla was rising/originating. Since the source region itself is completely dug out, the nalla course now receives almost no water in itself.

The following photo shows the amount of water in Nalla at Point 'A' at the time of visit.



Therefore, it becomes hence clear that user agency has not complied with the condition no. 8 of final FC approval.

Further condition No. 9 demands that coal evacuation should be done through high speed conveyor of 20 m width. During site inspection it was found that coal is being transported through conveyor partially, coal was seen being transported by road too. This apparently tantamount to partial violation of condition no. 9.

User agency has done considerable compliance related to soil, moisture and water conservation in the area including other conditions imposed in the final approval of 1026.438Ha.

Site inspection to proposed CA (DFL) area:-

The proposed CA in Degraded Forest Land (DFL) for the extant proposal is proposed over 665.237Ha of Degraded Forest land in Barkatha Forest Range, Hazaribagh (West) Forest Division. During the visit to the proposed CA DFL area, the following officials/representative were present:

- Sh. Shailendra Kumar, IFS, Hazaribagh (West) Forest Division
- Sh. Kamalesh Singh, Range Officer of Barhi/Barkatta.
- Sh. Rajendra Kumar, SBO.
- Sh. Deb Chand Mahto Kumar, SBO.
- Sh. Pavan V. Khandwe, Addl. General Manager (Mining), PB, NTPC Ltd.
- Sh. Birendra Kumar, Addl. General Manager (Env. Mgmt.) PB, NTPC Ltd.

The CA DFL area is constituted/identified in 7 patches spread across 8 villages. Most of the area was found suitable for raising compensatory afforestation. Few patches were found to have considerable amount of vegetation and the forest officials and the representatives of user agencies were asked to deduct the dense areas from the net workable extents. Considering the huge spatial extent of the patches, it may be difficult to completely replace the patches, hence gross area and net area consideration was asked for incorporation. Absence of existing boundary pillars, kuccha/pakka encroachments and less staff in position were few ubiquitous impediments observed which officials ensured to take care off.

The entire proposed CA (DFL) is situated in 8 villages, the details provided in the following table:

Name	Area in ha.	Observation (During Site Visit)
Patch 1	36.459	-
Patch 2	126.282	-
Patch 3	119.112	-
Patch 4	92.011	Encroachment small (village) has been observed
Patch 5	39.856	-
Patch 6	68.433	-

Patch 7	183.082	Encroachment (small village at Pandanatanr & Brick kiln at Bero) has been observed.
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Assessment of Violation in context with para 1.21 of FC Handbook:-

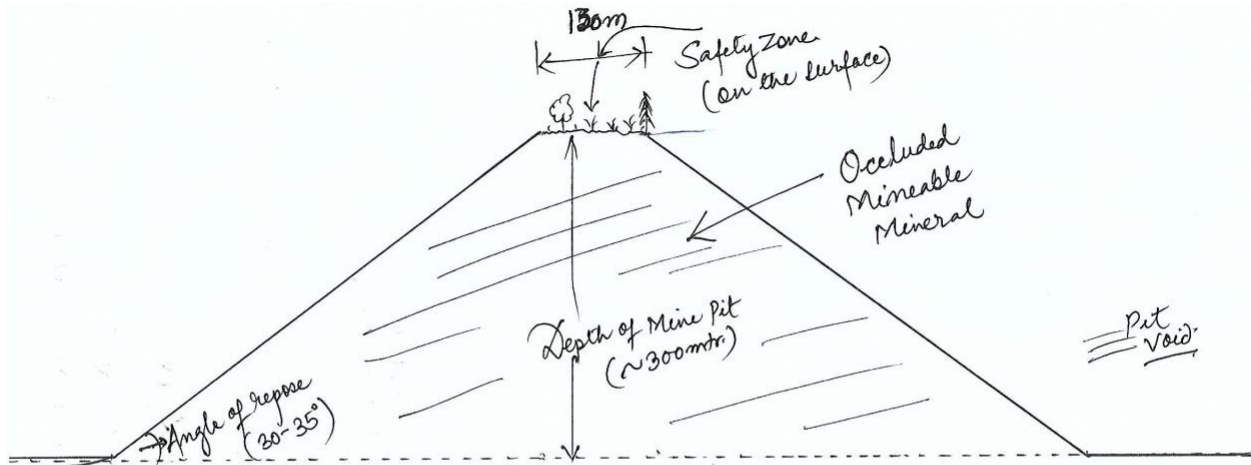
Since the user agency has violated the condition No. 8 of final FC approval for approved 1026.438 Ha forest land in the lease, the para 1.21 (III) is applicable to assess the violation.

Further, as the violation has been done by way of mining in the otherwise greenbelt, the situation of *fait-accomplis* has been created and hence now user agency can not comply with the condition anyways.

This *fait-accomplis* situation is the result of user agency's urge to extract more mineral & hence revenue generation.

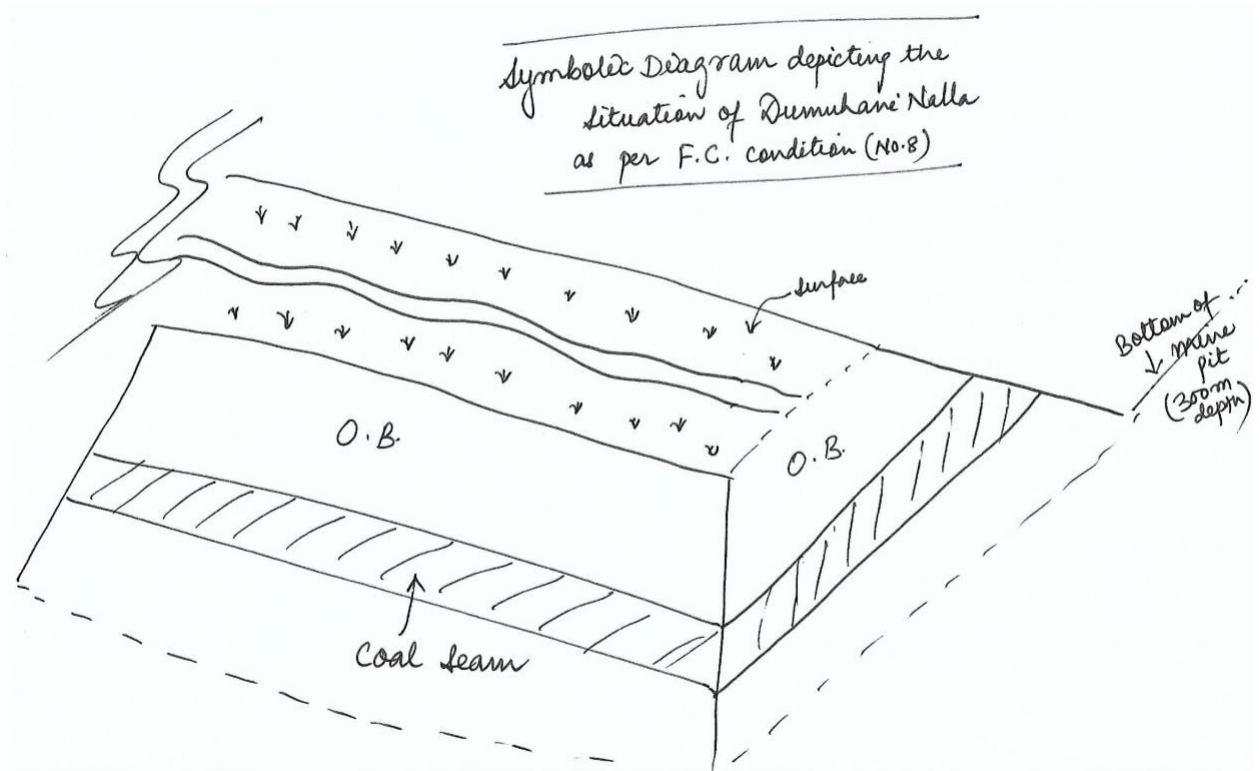
As per condition no. 8, user agency was supposed to maintain greenbelt of 50 meters width on the both sides of the stream (Nalla). Considering the total length of the Nalla, 12KM (12000 meters) within the lease area, and average width of 30 meters, the user agency was supposed to establish & maintain greenery (and not mining) in $12000 \times 130 = 1560000 \text{ m}^2$ or 156 Ha area.

Considering the Angle of Repose (AoR) of a relaxed 45° , and average depth of mining as 300meters;



∴ Representative diagram showing the cross-sectional view;-
 considering a more relaxed AOR of 45°; and Average stream bed width = 30mtr
 Cross-sectional Area = $\frac{130 + 730}{2} \times 300$
 = 129000 m²

A Total Earth of 129000 m² X 12000m = 1548 million m³ would have left undistributed throughout the course of Dumuhani Nalla within the lease (as depicted in the symbolic diagram below).



Considering a minimal 10% of total earth as useful mineral, the volume of Coal would be 154.8 million m³.

Therefore, considering the specific gravity of 1.8 for these coal, the total amount of Coal mined by violating the FC Condition is 278MT.

Hence, for mining this staggering amount of mineral the user agency has violated the condition of FC and the area involved in violation is 156 Ha.

Also, by mining in the otherwise postulated green area, the user agency has saved itself upon the cost of Afforestation too which was expected on the violated land.

Therefore, in assessment of the quantum of violation, the following points are considered (in accordance to the ministry's guideline dated 1/8/2017): -

1. Penal NPV: - 2 times of the Normal NPV as per para 1.21(iii) of the FC Guidelines Handbook.
2. Loss of Eco-system services that the green belt would have provided: - Equal to the NPV.
3. The greenbelt along the Nalla would have served as a good Habitat for avian fauna and other several biodiversity. Therefore, 50% of NPV is accounted for Habitat Destruction as per the guideline dated 1/8/2017.
4. Compensatory afforestation and soil moisture conservation cost that the user agency should have borne as per the laid condition. Since afforestation was to be done in linear patches, considering the increased fencing the rate of Afforestation is considered as Rs 5 Lakh per Ha.

Therefore, the Penalty assessed for the Fait-accomplis violation is:

156 X (3.5 times NPV+ Afforestation cost)

=156 X (3.5X1357110+500000) Eco class-III, Density=.8

=Rs 818982060/-.

Recommendations of IRO Ranchi:

The extant case was discussed in the REC meeting in light of the violation done by the user agency in the adjacent/contiguous area of the same mining lease.

REC members took serious note of the apathetic attitude of project proponent towards the conditions on which the very Forest Clearance was accorded towards the mining in forests.

Therefore, REC unequivocally recommended that the extant proposal of project proponent in the same lease area should only be considered after the penalty of Rs 818982060/- (Rupees Eighty One Crore Eighty Nine Lakh Eighty Two Thousand and Sixty only) is realized from user agency for violating the FC conditions and creating fait-accompli situation at the site against the guidelines of Hon'ble Supreme Court of India also.



Shashi Shankar

AIGF, IRO Ranchi.



Dy. DGF, IRO Ranchi.