

**Investigation into Alleged Environmental Violations by
Central Coalfields Ltd in Amrapali OCP:**

**Report of Committee appointed by Hon'ble National Green
Tribunal in *Sanjay Chauhan vs CCL & Ors (OA 28/2020/EZ)*
*vide order dt.11.05.2020***

Date of submission: 14 September 2020

1. INTRODUCTION

The North Karanpura coal belt in Jharkhand state straddles the districts of Ranchi, Chatra, Ramgarh and Hazaribagh and contains a large number of coal mines of various vintages and size, as well as some coal washeries and thermal power plants. In spite of the existence of multiple environmental regulations, there has been public concern at the extent of environmental pollution in this region.

The Hon'ble National Green Tribunal is currently hearing a case (OA No. 28/2020/EZ) in which the petitioner (Sanjay Chauhan, a resident of Dakra village of Ranchi district) has complained of non-compliance of environmental clearance (EC) conditions in the case of Amrapali Opencast Coal Mining Project (OCP) of M/s Central Coalfields Ltd.

The Tribunal, vide its order dt.11.05.2020 constituted a 4-person committee to verify the factual position on the ground. The committee consisted of:

1. Dr. Sharachchandra Lele (Distinguished Fellow in Environmental Policy & Governance, ATREE, Bengaluru)
2. Shri. Rajeev Ranjan (Scientist E, representing Ministry of Environment, Forests and Climate Change (MOEFCC), Regional Office, Ranchi)
3. Dr. G. P. Singh (Scientist D, representing Central Pollution Control Board, Regional Office, Kolkata), and
4. Shri. A. K. Yadav (Regional officer, Hazaribagh Region, representing Jharkhand State Pollution Control Board, which acted as the Nodal Agency).

Due to the COVID-19 pandemic and the consequent restrictions on travel, the committee's field visit was delayed, and the committee requested and was granted time till 16th September 2020 to submit its report. The committee conducted its visit to Amrapali OCP on 1st September 2020. This report presents the findings emerging observations made and discussions held with the petitioner and the respondent during the field visit, and perusal of related documents by the committee. We begin with a brief description of the coal mining project. We then summarise key points that emerged from recent inspection reports and/or notices issued by MOEFCC and JSPCB, followed by our own field observations. Where we have observed significant

non-compliance, we have given our estimates of the duration of non-compliance, and also added recommendations for how remediation may be carried for the immediate future. We end with a wider observation of the environmental trajectory of the region.

2. BASIC INFORMATION REGARDING THE AMRAPALI OCP

The Amrapali Open Cast Coal Mining Project (OCP) is located in Honhe, Kumarang Kalan, Binglat and other neighbouring villages of Tandwa tehsil of Chatra district in Jharkhand (see Figure 1). It received EC on 03.01.2006 for a normative production of 12 MTPA, which, however, mentions a larger mining lease area of the project as 1426.08 ha, but following a forest clearance received for a smaller area, it began operations in 2013-14 in a mine lease area of 619.87 ha. Subsequently, it received EC from MOEFCC on 20.03.2020 for expansion to normative production of 14.4 MTPA within the same mine lease area of 619.87 ha.

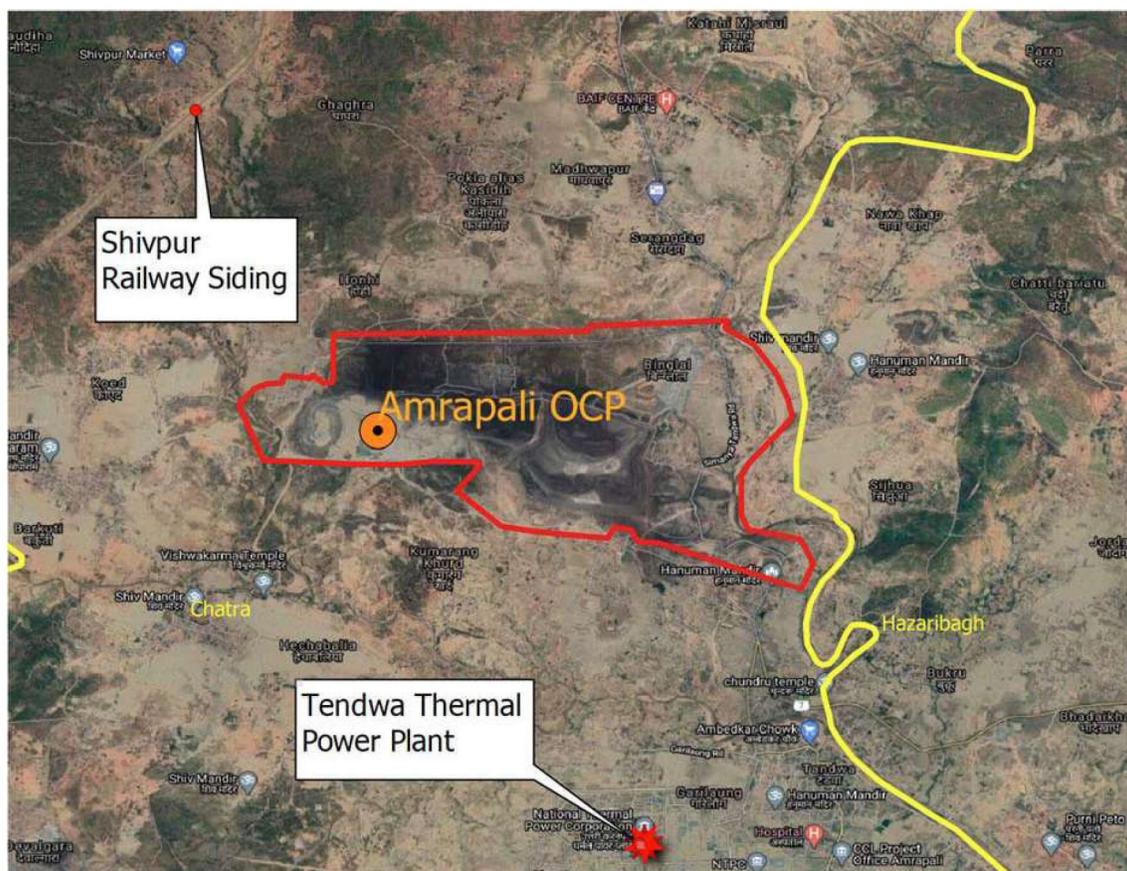


Figure 1. Google Map of Amrapali OCP with Shivpur railway siding and Tendwa Thermal Power Plant (approx. mine lease boundary in red; approx. district boundary and names in yellow).

3. SUMMARY OF MOEFCC AND JSPCB REPORTS PRIOR TO THE NGT COMMITTEE'S FIELD VISIT

Much before the current petition was filed with the NGT, the MOEFCC had issued a show cause notice vide letter no. F. No. J-11013/100/2018-IA-I(M) dt. 12.12.2018 to CCL regarding substantive non-compliance of EC conditions at Amrapali OCP (Annexure 1). The major points of non-compliance mentioned in the notice were: catch drains and retaining wall/toe walls not provided around OB dumps and coal dumps, inadequate green belt development/tree planting measures, measures to protect Barki river from polluting runoff not taken, no consultation carried out with Central Ground Water Authority/Board (CGWA/CGWB), and fugitive dust emissions had not been properly controlled. Following actions taken by CCL during year 2019, and a re-inspection on 11.09.2019, an updated set of observations was issued by Regional office Ranchi on 4.12.2019, which indicated that there continued to be partial non-compliance on the issues of *inter alia*:

- i) catch drains and toe walls around OB dump and catch drain around coal dump,
- ii) on the creation of an extra external OB dump,
- iii) on the creation of avenue plantations/green belt,
- iv) contaminated runoff flowing into Barki river/Dudhmatia nala,
- v) spontaneous combustion in coal dump, and
- vi) inadequacy of water sprinklers for controlling fugitive emissions.

The JSPCB had also issued an online show cause notice on 07 Aug 2020 regarding non-construction of toe wall, catch drains and settling tank, non-satisfactory tree plantation, and non- installation of PM₁₀ analyser (see Annexure 2).

4. OBSERVATIONS REGARDING CURRENT NON-COMPLIANCE AND RECOMMENDATIONS FOR THE FUTURE

4.1 Major issues:

1) Non-construction Coal Handling Plant (CHP):

Petitioner's allegation: The petitioner alleged that the construction of a CHP was part of the original EC conditions of 2006 and had not been complied with till date.

Requirement as per EC conditions:

[At the outset, it must be clarified that the issue of Coal Handling Plant (CHP), and final transport of coal are generally integrally linked. In a system where CHPs are proposed to be used, conveyor belts bring the coal from the mine pit or from coal dump area very near to the mine pit to the CHP, which includes a covered crusher and a silo into which the crushed coal is automatically loaded. The silo is supposed to sit astride a railway siding so that it can drop the coal into the railway wagons. Bag filters, water spraying/dry fog/misting arrangements at transfer points, loading and unloading points can be provided in the CHP system. This entire arrangement minimises the fugitive emission of coal dust. The CHP is supposed to be equipped with sprinklers to further minimise dust emissions. Note that the CHP cannot be operated meaningfully if the siding is not available and coal transport is being done by road. When trucks are used for transport, they are loaded using JCBs or front loaders. Thus, the requirement to construct a CHP goes hand-in-hand with the requirement to construct a railway siding to despatch the coal from the CHP and to construct conveyor belts and SILO to bring coal to the CHP.]

The original EIA/EMP of 2006 clearly showed that a CHP was to be constructed in an area of 20.33 ha (see Figure 2), along with a dedicated rail siding (hereinafter Amrapali railway siding) to be constructed in a loop, for which an area of 179 ha was to be set aside. The EC dt.3.01.2006 also clearly requires the construction of a CHP (Specific Condition xiv).

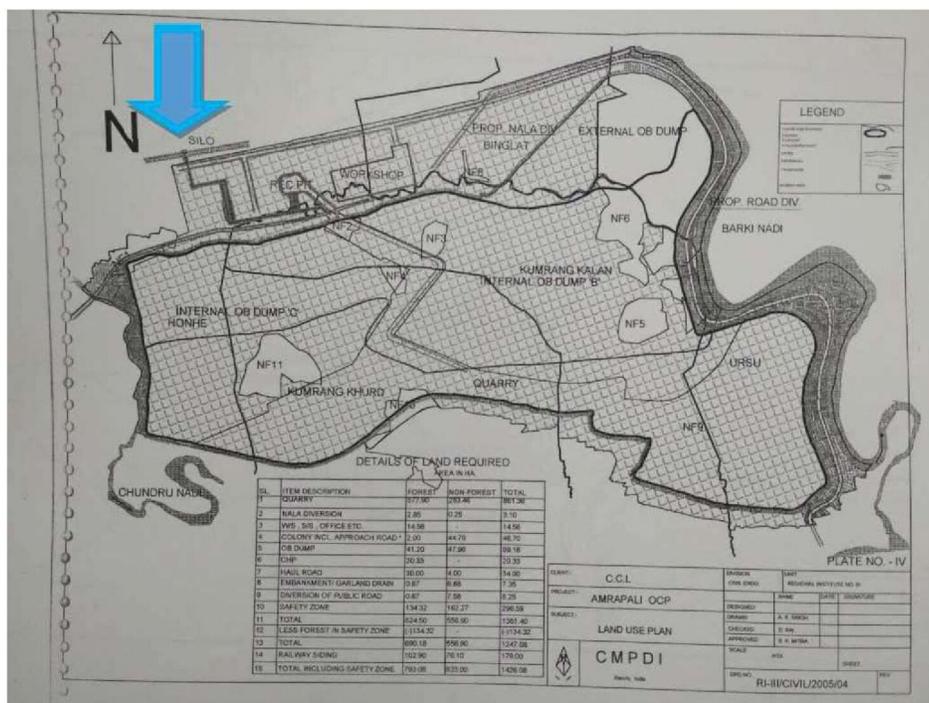


Figure 2. Map of Amrapali OCP in EIA document of 2006, showing location of CHP (Silo) at top left over proposed dedicated railway siding (blue arrow).

Subsequently, CCL submitted an application in January 2020 for expanding production to 14.4 MTPA, under MOEFCC's Office Memorandum F.No.J-11015/224/2015-IA.II Dt. 15.09.2017, which permitted expansion of up to 40% in production capacity without the holding of a public hearing. One of the conditions of this OM is that "Coal transportation is through conveyor system up to the silo and then loading to railway wagons involving no transportation through roads". In the Addendum EIA/EMP submitted along with its application for expansion, CCL acknowledged, however, that coal transport was still happening to Balumath siding located 25-30km away (page 7). In the EC issued on 20.03.2020, specific condition (v) requires that "PP shall implement in-pit conveyor to railway siding through silo loading in three years", and "Amrapali Railway siding shall be completed in 3 years and road transportation to Balumath railway siding will be stopped accordingly" (Specific Condition xxvi).

Observations by this Committee:

- From documents provided by CCL, observations by MOEFCC's Ranchi Regional Office in previous inspections, and the Addendum EIA/EMP report mentioned above, it is clear that, from 2013-14 (when operations began) till

date, no siding or CHP has been constructed. Till about October 2019, the coal was being transported by trucks to the Balumath siding, which is approximately 25km away from the mine.

- b) About a year ago, the Shivpur siding was commissioned, and at the time of the field visit by this Committee, **coal was being sent by road to the Shivpur siding located at ~6km from the mine.**
- c) Furthermore, the field visit showed that road transport of coal was resulting in much spillage of coal on the road and consequent air and water pollution. **Coal dust was observed to be flowing off the road** into forest areas and agricultural fields, nullahs and ponds (see Figure 3 and Figure 4). In the dry season, this dust will also create serious air pollution. It may be noted that there are some settlements on the way.



Figure 3. Coal dust on road used to transport coal to Shivpur siding



Figure 4. Coal dust on road used to transport coal to Shivpur siding (left) and coal dust flowing off the road into a nullah (right)

- d) Finally, the Shivpur siding is only in partial compliance with CPCB's 2015 guidelines environmental management of railway sidings; while windscreen, plantations, catch drain and sedimentation pond are in place (see Figure 5-left), **the water being used for sprinkling is coming from a borewell that does not have CGWA approval (Figure 5-right).**
- e) Committee members were of the view that to minimize coal spillage on roads, a gap of 5-10 cm may be left (from top edge of trucks) while loading the transportation trucks.



Figure 5. Shivpur siding: Sedimentation pond to catch runoff (left); pumphouse for borewell used to supply water to sprinklers (right)

2) Plantation and green belt:

Petitioner's complaint: The development of green belt in and around the mine site is completely inadequate, in violation of Specific Condition (vi).

Requirements as per EC conditions: Specific Condition (vi) in the EC of 2006 required the development of green belt in 526 ha out of the planned total mining lease area of 1426.08 ha i.e. 37%, "including planting the native species around the ML area, OB dumps, coal handling plant, roads, etc." at a density of 2500 trees/ha. If the actual operations were reduced to 619 ha (as mentioned in section 2 above), then one would expect the development of green belt/plantations in at least a proportionate area, i.e., 229 ha. Similarly, the EC of 2020 specifies that "[Thick] Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible" using a mix of native species, and "other [external] OB dumps shall be stabilised with native grass species to prevent erosion and runoff".

Committee's Observations:

- a) Grassing and vegetation have come up in some portions of the Honhe OB dump (see Figure 7 & 8) but in a large portion of that OB dump grassing and vegetation has not been developed/did not come up.



Figure 6. Grassing and vegetation on Binglat OB dump: recently done (left) and barren patches remaining (right)

- b) Grassing and vegetation had been developed over the slopes of Binglat OB dump (see Figure 6-left) but there are still large portions where grassing and vegetation has not come up (see Figure 6-right).

Overall, plantation and green belt development was not found to be satisfactory. While planting activity has recently been carried in many places, several patches on the OB dumps were still found bereft of vegetation cover, and Project authorities have not done plantations as per their commitment in EIA/EMP report.

3) Preventing silt movement from OB and soil dumps into streams

Petitioner's allegation: Measures for the prevention of surface runoff have not been carried out. [pt.12]

Requirements as per EC conditions: EC of 2006 specified that "Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. ... The drains should be regularly desilted and maintained properly." Similarly, the EC of 2020 specifies that "Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps and OB dumps to prevent runoff of water and flow of sediments directly into the river and water bodies."

Observations by this Committee:

- a) A retaining wall had been constructed around Honhe OB dump (see Figure 7). However, gaps have been left in the wall at many places (see Figure 7-left) and the wall is broken in a few places (see Figure 7-right). This may lead to water and silt exiting the wall area and ultimately silt flow to outside area/low lying area. The wall construction also appeared weak (without cement grouting) in several places. Retaining wall around the Binglat OB dump is older and more secure although gaps have been left in the wall at few places there also. The top soil dump also had a retaining wall and catch drain.



Figure 7. Retaining wall around Honhe OB dump, with gap (left) and broken portion (right).

- b) Catch drains have also been constructed around the Honhe OB dump in between the dump and the retaining wall (see Figure 8-left). However at some places it was observed that road construction work was being carried out in between retaining wall and OB dump (see Figure 8-right) and there were no catch drains at those places. Similarly, siltation ponds have been constructed to catch the silt from the catch drain. But at one place, the flow from the catch drain was being directed out of the project boundary, without any sedimentation tank being provided, so that water with silt would flow to low lying area and ultimately to the nearby river



Figure 8. Catch drain around Honhe OB dump (left) and places where road construction has covered catch drain (right)



Figure 9. Siltation ponds linked to the catch drains (left); place where catch drain is let out directly (right)



Figure 10. Honhe OB dump slope being dug into for making road

- c) At the Honhe OB dump, road construction work was being carried out using OB material excavated from the dump (see Figure 10), resulting in loss of grass cover and rendering the slope of the dump unstable.

Overall, as previous MOEFCC Ranchi Regional office monitoring and or six monthly compliance reports show, there has been much delay in complying with these conditions relating to control of soil erosion and prevention of silt runoff from the OB and topsoil dumps. While recently, there has been progress on this front, there are still areas of non-compliance/partial

compliance or use of incorrect methods or weak structures, which need to be rectified.

4) Preventing polluted runoff:

Petitioner's allegation: Basic measures to prevent runoff of effluents from the mine area have not been carried out.

Requirements as per EC conditions: EC conditions clearly require the construction of garland/catch drains and siltation ponds around coal dumps, coal yards, CHP and other such structures to prevent coal dust from entering streams and water bodies.

Observations by this Committee:

- a) The weigh bridge area (where coal bearing trucks are weighed and lot of coal spillage and heaps are observed) is located at a higher elevation from which runoff (from rain and sprinklers) will end up in low lying areas and eventually into the river. There was no catch drain or walls around this area and water carrying coal flows in the low lying area and ultimately to river Barki (see Figure 11).
- b) Similar problems of uncontained runoff were observed at the backside (Kumarang Kalan side) of the weigh bridge and one more weighbridge.



Figure 11. Coal heaps in weigh bridge area (left) and runoff from weigh bridge area entering nullah (right), which eventually joins Barki river.

Overall, there remain several places where coal dust runoff from coal dump, weighbridge areas, etc. is not properly contained in drains and sedimentation ponds.

5) **Groundwater recharge:**

Petitioner's allegation: Structures for recharge of groundwater are inadequate, considering the size of the mine [pt. 15].

Requirements as per EC conditions: Specific condition (ix) of the 2006 EC and Specific condition C(v) of the 2020 EC require the implementation of "suitable water conservation measures to augment groundwater".

Observations by this Committee: As reported in the updated EC monitoring report of 4.12.2019, two ponds and one check dam have been constructed recently. Given the size of the mine (more than 600 ha) and the fact that the rainfall runs off in multiple directions, **additional recharge structures need to be constructed.**

4.2 Procedural issues:

Petitioner's allegation: Monitoring of groundwater is inadequate.

Requirements as per EC conditions: Specific condition (x) of EC of 2006 and Specific Condition C(iii) of EC of 2020 require that "regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers".

Observations by this Committee: Project Proponent has submitted details of Well Inventory and Water Level in Buffer Zone of Amrapali OCP. Well level measurement has been done by CMPDI. Project Proponent has submitted monitoring data of the year 2013 (Pre and Post monsoon), 2014(August 2014), 2015(Pre monsoon), 2016, 2017, 2018 (Pre and Post monsoon) and 2019 (Pre Monsoon). Comparative Analysis of Pre and Post monsoon data of the year 2013, 2018 and pre monsoon data of 2019 (submitted by Project Proponent) is given below in

Table 1.

Table 1. Groundwater levels in monitoring wells around Amrapali OCP (data provided by project proponent)

Sl. No	Village*	Water Level (meter), BGL				
		Pre-2013	Post-2013	Pre-2018	Post-2018	Pre-2019
1	Honhe	9.20	5.30	9.80	6.85	8.80
2	Shivpur	10.50	5.80	9.90	5.80	10.10
3	Pachra	9.30	6.20	9.35	4.55	9.05
4	Ursu	9.10	5.40	9.80	5.65	8.80
5	Binglat	4.85	2.20	4.35	3.10	5.20
6	Kumrang Kalan	7.0	4.40	5.80	3.90	5.20

The Project Proponent has also submitted a copy of ground water level data submitted to Central Ground Water Board, Patna for the current year. Ground water level data was monitored through piezometer and in the winter season (January 2020) water level data was 55.41 m, BGL, in the pre-monsoon season (June) water level reading was 48.62 m, BGL and in the monsoon season (August) water level reading was 05.3 m, BGL.

In short, it is clear that the Project Proponent has established a reasonable network of open wells and piezometers wells around the mine since 2013, and as such the project is in compliance with EC conditions regarding groundwater monitoring. However, Project Proponent should ensure that it sends groundwater level and quality monitoring data to RO Ranchi of MOEFCC in addition to other agencies as per EIA/EMP, EC and rules.

5. THE LARGER ENVIRONMENTAL CHALLENGE IN THE NORTH KARANPURA COAL MINE BELT

As the map in Figure 12 and plan in Figure 13 show, the North Karanpura coalfield has a large number of coal deposits, and even though some old mines are reportedly on the verge of being closed down, mining activity is likely to expand very significantly in the coming years with the opening of new large mines (Sanghamitra OCP, Ashoka West OCP, Amrapali Expansion OCP, and so on). Equally important, attracted by the coal deposits, the region is seeing an expansion in coal-based thermal power plants

(TPPs). The 2400 MW Tandwa TPP by NTPC is about to be commissioned, and several other TPPs are planned within a radius of 25km of Dakra.

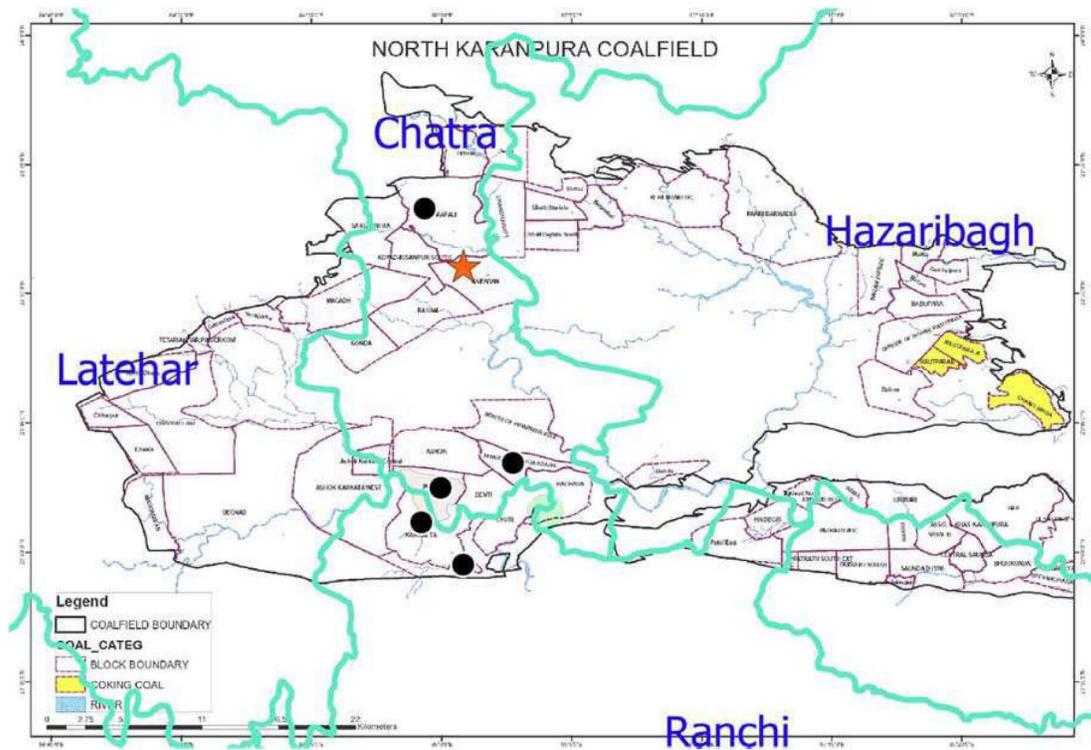


Figure 12. Overview of North Karanpura Coal field region. Black dots indicate the mines of Amrapali (northernmost dot), and Piparwar, Purnadih, Rohini and Dakra; red star indicates Tandwa TPP. Green lines indicate district boundaries and blue lines indicate rivers.

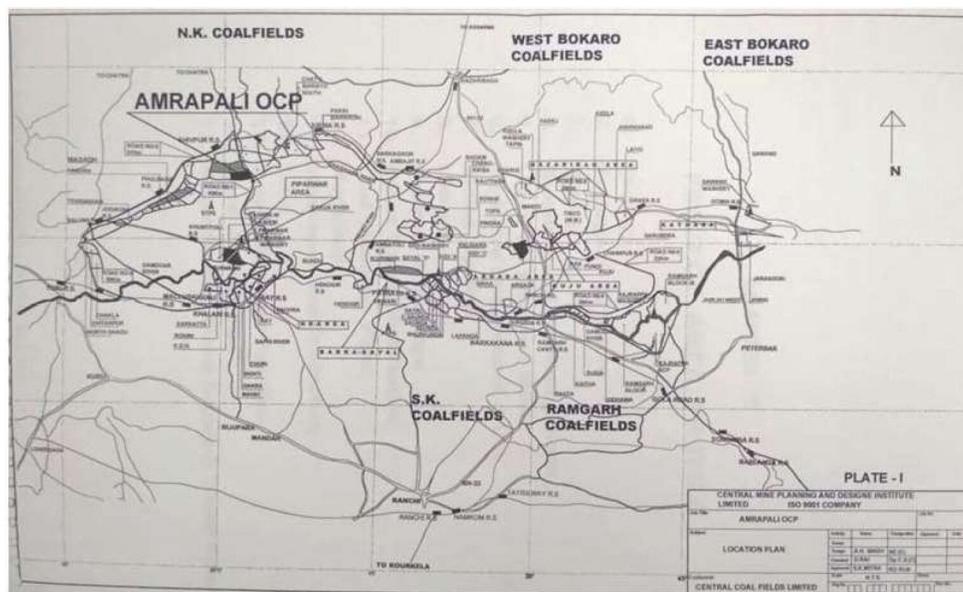


Figure 13. Location plan of Amrapali OCP. Neighbouring mines and coalfields can also be seen in the figure.

The **cumulative environmental impacts** of these developments cannot be understood through individual EIAs or investigations of individual projects. In particular, coal transport occurs outside project premises on public roads or via common railway sidings used by multiple projects. Similarly, in a region rich in rivers, the impact of cumulative forest loss and mining activity on rivers and groundwater hydrology can only be understood at the catchment or sub-basin scale. The public health and socio-economic impacts of such large-scale mining and TPP activity again will be non-linear and complex.

Experience from elsewhere, such as Dhanbad (Jharkhand), Singrauli (Madhya Pradesh/Uttar Pradesh), Jharsuguda (Odisha), and Tamnar-Ghargoda (Chhattisgarh) show that, in the absence of forethought, such coal-rich regions quickly end up as “critically polluted areas”, with enormous damage to public health and the wider environment, unending environmental litigation, and social conflict.

To avoid this region having a similar fate, we urge that a wider and long-term perspective be adopted, that **a process for region-scale environmental carrying capacity estimation be carried out**, and that future project planning and environmental clearances may be based on such an understanding and through some mechanisms for region-scale coordination.

Signed by



(Dr. Sharachchandra Lele)
Distinguished Fellow, ATREE



(Shri. Rajeev Ranjan)
Scientist E, MOEFCC, Ranchi



(Dr. G. P. Singh)
Scientist D, CPCB, Kolkata

I am not agree with point no-5.



(Shri. A. K. Yadav)
Regional Officer, JSPCB, Hazaribagh

* I don't agree with region scale environmental carrying capacity estimation. It would be better to ensure 100% compliance of Existing EC conditions along with compliance of order of Hon'ble NGT (OA 284/2019 dated 19.9.2019) which states all mines in the nearby area using road for coal transportation should maintain a free board of minimum 5 cm in all loaded vehicle along with properly covering with impervious material to prevent escape of fines.

ANNEXURES

1. Show cause notice dt.12.12.2018 issued by MOEFCC to CCL regarding non-compliance in Amrapali OCP, and, following responses submitted by CCL,modified notice issued on 04.12.2019.
2. Show cause notice dt. 7.08.2020 issued by JSPCB to CCL regarding Amrapali OCP.
3. Additional photographs taken during field visit of the Committee.

ANNEXURE 1



F. No. J-11013/109/2018-IA-I (M)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

By Speed Post

Indira Paryavaran Bhavan
Jor Bagh Road, Aliganj
New Delhi-110 003
E-mail: sudheer.ch@gov.in

Dated: 12th December, 2018

Sub: Notice under Section 5 of Environment (Protection) Act, 1986 regarding Non Compliance of Environment Clearance conditions- Show Cause Notice - reg.

Ref: Ministry's EC letter No. J-11015/109/2003-IA.II(M) dated 03.01.2006.

WHEREAS, Environmental Clearance (EC) was granted to M/s Central Coalfields Ltd. for Amrapali opencast coal mining project located in part of village Khumarang Khurd, Khumarang Kalan, Ursu, Binglat, Honhe, Tehsil Pachra Block on the east and Koed block on the west, District Chatra, Jharkhand vide letter No. J-11015/109/2003-IA.II(M) dated 03.01.2006, subject to implementation of the various conditions and environmental safeguards contained therein, and

2. WHEREAS, the project was monitored by the Regional Office of this Ministry at Ranchi on 19.12.2017 which has submitted its report on 14.09.2018. The report has been examined by the Ministry and it is observed that there is substantive non-compliance of environmental conditions contained in Environmental Clearance letter dated 03.01.2006.

3. WHEREAS, the following Non-Compliances with respect to the Environmental Clearance No. J-11015/109/2003-IA.II(M) dated 03.01.2006 have been observed:

- i. Regional Office Ranchi has found Forest Clearance from MoEFCC vide letter no. F.No.8-48/2008-FC dated 12.10.2010 for diversion of 531.64 ha of forest land for Amrapali OCP. Forest clearance of remaining forest has not been submitted. (Condition no. i)
- ii. Storage and conservation of top soil is not done as per EIA/EMP recommendations. Also, the quantity/volume of top soil used for reclamation and rehabilitation of mined out areas has not been submitted. (Condition no. ii)
- iii. Project authorities must submit the cross-section of all the O/B dumps mentioning height, width, angle of slope and volume in it. (Condition no. iii)
- iv. The catch drains must be provided for other places around the O/B dumps, soil dumps and coal dumps. Catch drains to arrest silt and sediment flows from dumps are not provided at required places. (Condition no. iv)
- v. No retaining wall at toe of dumps and O/B benches could be observed in the project. (Condition no. v)
- vi. The green belt development has not been found satisfactory. (Condition no. vi)
- vii. No embankment has been found to protect the area from flood water of River Barki. (Condition no. viii)
- viii. No document submitted to show that consultation with Regional Director, Central Ground Water Board has been done. (Condition no. ix)
- ix. No piezometers have been found on the project site. Data collected has not been sent to Central Ground Water Authority as per EC condition. (Condition no. x)
- x. No letter has been submitted to prove that permission from competent authority has been obtained for drawl of ground water for domestic use. (Condition no. xi)
- xii. No document with respect to consultation with Regional Director, CGWB has been submitted. Rain water harvesting plan has not been submitted. (Condition no. xii)
- xiii. Appropriate mitigative measures to prevent pollution of Barki river in consultation of State Pollution Control Board has not been taken up. (Condition no. xiii)
- xiii. No STP and ETP have been installed till date. Oil and grease trap has not been provided at the project site. (Specific Condition No. xv and General Condition No. x)

- xiv. Latest CTO has not been submitted. (Condition no. xvi)
- xv. Comparison of pre-project and latest health report of the community has not been submitted. (Condition no. xvii)
- xvi. Monitoring Report of land use pattern using remote sensing technique has not been submitted to Regional Office Ranchi. (Condition no. xviii)
- xvii. Copies of Pollution under Control of vehicles in the project have not been submitted to Regional Office Ranchi. (Condition no. xix)
- xviii. Compensation to land ousters and land losers has not been provided. (Condition no. xx)
- xix. Copy of blaster diary (at least for 3 months) having mention of burden, spacing, stemming amount of explosive per hole and per delay, etc. has not been submitted (Condition no. xxi)
- xx. Copy of communication with concerned forest official for conservation of endangered fauna has not been submitted to Regional Office, Ranchi. (Condition no. xxii)
- xxi. Copy of report/observations made by institutes (ISM, CMPDI) for protection of flora and fauna has not been submitted to Regional Office, Ranchi. (General Condition no. iii)
- xxii. Monitoring data of CO has not been submitted. Data from four locations has not been submitted. NAAQS - 2009 has not been followed. (General Condition no. iv)
- xxiii. Fugitive dust emissions have not been controlled properly. Details of water sprinklers i.e. running of water tankers and trips done/ kilometers covered has not been submitted to the Regional Office (General Condition no. v)
- xxiv. Details of Protective Respiratory devices distribution amongst employees and occupational health surveillance programme have not been submitted. (General Condition no. xi)
- xxv. Expenditure on environmental protection has not been submitted. PP should submit year wise expenditure details on Environmental Protection measures. (General Condition no. xiii)
- xxvi. A copy of receipt of EC has not been submitted from concerned Panchayat/ Zila Parishad, Municipal Corporation, etc. (General Condition no. xv)
- xxvii. Name of newspaper and date of newspaper advertisement informing that the project has been accorded has not been submitted. (General Condition no. xvii)

4. NOW, THEREFORE, the Project Proponent is directed to submit Action Taken Report (ATR) with respect to the aforementioned Non-Compliances, within 30 (thirty) days of the issue of this Notice. It may be noted that, if no satisfactory reply is received within the prescribed time frame, the Ministry will be constrained to take necessary action as deemed fit and appropriate in the circumstances of the case without any further notice to the Project.


(Dr. Sudheer Chintalapati)
Scientist 'D'

To,

M/s Central Coalfields Limited
Amrapali Opencast Coal Mining Project
Zila Parishad Building, Tandwa, Chatra,
Jharkhand- 825 321

Copy to:

1. The Addl. Principal Chief Conservator of Forests (Central), Ministry of Environment, Forest and Climate Change, Regional (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi - 834002.
2. The Member Secretary, Jharkhand Pollution Control Board, H.E.C., Dhurwa, Ranchi-834004 (Jharkhand).
3. The Member Secretary, IA-Division (Coal Mining), Indira Paryavaran Bhawan, Ministry of Environment, Forest & Climate Change, Jor Bagh Road, Lodhi Road, New Delhi-110003


(Dr. Sudheer Chintalapati)
Scientist 'D'
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ANNEXURE 2

03-09-2020
01:55 PM

Note By: R.P. Kumar HO(Hazaribagh005)

Forwarded To: L. B. Choudhary (HO)

Activity: Forward

Description: Show-cause has been asked.

Activity: Show Cause

Show-cause date has been fixed on 08.09.2020 at 11.00 AM in the office chamber of Member Secretary as of following reasons: During inspection following discrepancies were found: (i) Construction of toe wall and garland drain is partially complied; (ii) Reclamation of mine with OB dump and plantation of trees is partially complied; (iii) Construction of catch drain, retaining wall and siltation pond is partially complied; Non-complied General Conditions: (i) PM 10 analyzer not installed; (ii) Enough tree plantation has not been made; Therefore, you are given an opportunity to attend the show-cause at scheduled date and time otherwise, your application may be rejected.

Annexure 3

Some additional photographs of Amrapali Coal Mines project,CCL, taken during Field inspections on 01.09.20



Photo 01: Photo of catch drain around the Honhe OB dump



Photo 02: Photo of top soil dump adjacent to Honhe OB dump.



Photo03:Photo of low lying area adjacent to coal heaps around weigh bridge.Water flows into the river within close distance from there.



Photo04:Photo of coal heaps/dump near a weigh bridge with no catch drains/siltation ponds around



Photo 05: Photo of one of the weigh bridges with



Photo 06: Photo of wall at the toe of the Bingalat

no catch drains/siltations ponds around coal heaps.



Photo07: Photo of Bingalat OB dump with grassing and vegetation in some portions .

OB dump ,new grassing and plantation can also be seen at some portions of the slopes .



Photo08:Photo of sedimentation ponds cum check dam over local stream/nallah adjacent to OB dump