

BEFORE THE NATIONAL GREEN TRIBUNAL, KOLKATA

Appeal No: 06 of 2020 (EZ)

Sanjay Chauhan

Applicant

Vs.

Union of India & Ors.

Respondents

INDEX

S. No.	Particulars	Page No.
1.	Counter Affidavit On Behalf Of Respondent No. - 04 (Jharkhand State Pollution Control Board)	575 to 583
2.	Annexure - A: True copy of the Report submitted by the Committee along with all the Annexures.	584 to 781
3.	Annexure - B: True copy of the Site Inspection / Monitoring Report of Amrapali OCP dated 13/01/2021 carried out by MoEF&CC.	782 to 837
4.	Annexure - C: True copy of the Inspection Report of Amrapali OCP dated 22/01/2021, carried out by JSPCB.	838 to 859
5.	Annexure - D: True copy of the Inspection Report of Amrapali OCP dated 16/12/2021 carried out by JSPCB.	860 to 879

6.	Annexure - E: True copy of the Inspection Report of Amrapali OCP dated 07/01/2022 carried out by JSPCB.	880
7.	Annexure - F: True copy of the Inspection Report of Amrapali OCP dated 24/02/2022 carried out by JSPCB.	881 to 907
8.	Annexure - G: True copy of the Board's Ref. No. B - 209, Ranchi, Dated 25/01/2022.	908 to 912

Filed by: -

Surendra Kumar  
Advocate

Jharkhand State Pollution Control Board



**BEFORE THE NATIONAL GREEN TRIBUNAL, KOLKATA**

Appeal No: 06 of 2020 (EZ)

Sanjay Chauhan Applicant

Vs.

Union of India & Ors. Respondents

Counter Affidavit on behalf of Respondent No. 4 Jharkhand State Pollution Control Board in compliance of order dated 17/11/2021 & 08/02/2022.

I, Yatindra Kumar Das, son of Late K. K. Das, presently posted as the Member Secretary, Jharkhand State Pollution Control Board, H.E.C, Dhurwa, Ranchi, and am duly authorized and here by solemnly

state and affirm as follows:-

Authorised under Notaries Act 1952 & Notaries Rules 1956 by Govt. of Jharkhand, Ranchi (India)

21 MAR 2022

760 Data



1. That at present, I am working and posted as the Member Secretary, Jharkhand State Pollution Control Board, H.E.C, Dhurwa, Ranchi and as such, I am well acquainted with all the facts and circumstances of this case.

2. That I have gone through the order dated 17/11/2021 & 08/02/2022 passed by Hon'ble NGT, EZB, Kolkata and has understood the contents therein.

3. That, I have been authorized to swear this affidavit on behalf of the Respondent No. - 4 Jharkhand State Pollution Control Board (JPSCB) by the competent authority. Further it is stated that I have gone through the relevant files and records.

4. That, it is humbly stated and submitted that the Hon'ble NGT, EZB, Kolkata in its order dated 17/11/2021 had directed the Committee to visit the site and prepare its report in considering the conditions laid down in paragraph 6 of the EC dated 20.03.2020 as well as the OM dated 15.09.2017 and the observations dated 04.12.2019

21 MAR 2022



of the Regional Office of MoEF&CC and submit a fresh report. Moreover, the Committee was also directed to place before Court the observations of the Regional Office dated 04.12.2019.

5. That, it is humbly stated and submitted that in light of the Hon'ble NGT, EZB, Kolkata order dated 17/11/2021 the two members of the Committee Dr. G. P. Singh, Scientist - D, CPCB Eastern Regional Directorate, Kolkata and Sri A. K. Yadav, Regional Officer, JSPCB Regional Office, Hazaribagh had visited the site on 03-04 Feb, 2022 and submitted the fresh assessment Report. The Overall observations of the committee are as follows: -

a) The committee does not agree with the views of the Expert Appraisal Committee (EAC) appraising the fulfillment of certain requirement (Sl. No. 2 & 3) as reported in the *Summary record of 53<sup>rd</sup> Meeting of the Expert Appraisal committee for Environmental Appraisal of Coal Mining Projects meeting held on 20.2.2020 (Annexure VIII)* as the submission of the PP in compliance to the Office

21 MAR 2022



memorandum J11015/224/2015 IA.II dated 15.9.2017 tabulated on (Sl. no 2 and 3 in Page 39 of 101 draft minutes of 53<sup>rd</sup> meeting 20.3.2020 (**Annexure VIII**)) are not in line with the requirement of the Office Memorandum also detailed in point 4 of this report.

b) As per the OM dated 15.9.2017 Environmental Clearance for Expansion of coal Mining projects exemption from public hearing is subject to fulfillment of certain requirements stated in para 3 and para 4 however the present status as observed during inspection is that

I. Neither conveyor system nor any silos are installed so far.

II. 100 % of coal is still being transported through road using dumpers.

III. Conventional mining using drilling blasting is used for Overburden as well as the coal which reportedly cannot be mined out using surface miners (it accounts for around 1 % of total coal as reported).

21 MAR 2022



IV. Work order for Amrapali OCP siding of CCL was awarded in the year 2017 (**Annexure VIA**) but still it is not completed.

V. The work order for Coal Handling Plant (CHP) has been awarded to M/s Larsen and Toubro Limited on 31.12.2020 (letter of acceptance of order is Enclosed as **Annexure VIB**)

c) The observations of Regional Office of MoEF&CC dated 04.12.2019 which were to be complied within one year is still not fully complied.

Based on the above the recommendations of the committee are as follows: -

a) It should be ensured that the EAC should carry out the appraisal for fulfillment of conditions mentioned in the OM dated 2017 with due diligence to ensure compliance of conditions to meet the objective for which these conditions have been stated in OM.

b) It should be ensured by Project Proponent that the while submitting any compliance status report w.r.t. the conditions of OM

21 MAR 2022



/EC/CTO/Directions etc the submission are in line with the specific conditions and must not deviate from the exact condition to hide the non-compliances w.r.t. that specific conditions.

c) The industry should ensure compliance of all the conditions mentioned OM dated 2017 as well as EC dated 20.3.2020 and the observations of Regional Office of MoEF&CC dated 04.12.2019 at the earliest.

d) Mining authority should also ensure compliance of Hon'ble NGT order (OA 284/2019 dated 19.9.2019) to prevent spillages from the coal transportation. The order states that a minimum free on board (preferably not less than 5 cm) should be maintained in all the loaded vehicles along with proper covering.

Photocopy of Report submitted by the Committee along with all the Annexures are annexed as **Annexure - A.**

21 MAR 2022



6. That, it is humbly stated and submitted that the Report of the Inspections carried out by the MoEF&CC, Regional Office, Ranchi dated 04/12/2019 and 03/12/2021 is attached as Annexure - V & X respectively in the Committee's Report and the Inspection Report dated 13/01/2021 carried out by the MoEF&CC, Regional Office, Ranchi is also attached herewith.

Photocopy of Inspection Report dated 13/01/2021 carried out by the MoEF&CC, Regional Office, Ranchi is annexed as **Annexure - B.**

7. That, it is humbly stated and submitted that from the Report of the Inspections carried out by the JSPCB dated 22/01/2021, 16/12/2021, 07/01/2022 & 24/02/2022 the following major observations can be concluded: -

21 MAR 2022

a) The Unit has not constructed the Railway Siding.



b) The Unit has not constructed the Coal Handling Plant (CHP).

c) The Unit has not installed the silos.

Photocopy of Inspection Report dated 22/01/2021, 16/12/2021, 07/01/2022 & 24/02/2022 carried out by the JSPCB is annexed as **Annexure - C, D, E & F respectively.**

8. That, it is humbly stated and submitted that for the non compliances mentioned in para 7, an Environmental Compensation of INR 1,35,00,000.00 (Rupees One Crore Thirty Five Lakhs only) was levied on M/s Amrapali OCP vide Board's Ref. No. B - 209, Ranchi, Dated 25/01/2022; which has been submitted by the Unit in Board.

Photocopy of Board's Ref. No. B - 209, Ranchi, Dated 25/01/2022 is annexed as **Annexure - G.**

21 MAR 2022



9. That, it is humbly stated and submitted that the JSPCB will take further action as per law in light of the observations of the committee.

10. That the statement made in forgoing paragraphs are true to my knowledge in annexure are true copy of its original.

*Yash Prakash*

DEPONENT

**VERIFICATION:**

Verified at Ranchi on this the day of *21 MAR 2022* March, 2022 that the averments & facts stated herein above are true and correct to my knowledge and belief and nothing material has been concealed therefrom.

*Yash Prakash*

DEPONENT

*21 MAR 2022*



*Mahto*  
*21/03/22*  
NOTARY PUBLIC, RANCHI

Signature Attested and Identification of Lawyer

*Adh*  
*21/03/2022*  
*FN 57/14*

**Report in the matter of Appeal No 6 /2020/EZ IA no 55& 56/2020/EZ****1) Back ground:**

The matter relates to the Appeal No. 6/2020/EZ (I. A. No. 55/2020/EZ & I. A. No. 56/2020/EZ). In compliance to the order of the Hon'ble N.G.T. dated 28.11.2020 a committee was constituted consisting of the following members from different Organization as below:

Sl No.	Name of Organization	Person nominated with designation
i.	ATTREE, Bengaluru	Dr Sharachchandra Lele, Ex-Member, EAC
ii.	Ministry of Environment Forests and Climate Change (MoEF& CC) , Regional office Ranchi	Sh Rajeev Ranjan, Scientist-E, Regional Office, Ranchi
iii.	Central pollution control Board, Eastern Regional Directorate, Kolkata	Dr G.P.Singh, Sc-D, ERD Kolkata
iv.	Jharkhand State Pollution Control Board, Ranchi.	Sh A.K.Yadav, Regional Officer, JSPCB , Hazaribagh

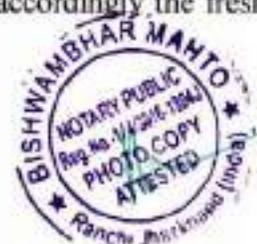
In compliance to the above order a counter affidavit dated 07.09.2021 was filed by the Jharkhand Sate Pollution Control Board (**Annexure I**) along with the report of the committee. However, the Hon'ble NGT is not satisfied with the report and has made some observations in its order dated 17.11.2021(**Annexure II**) The Hon'ble NGT has specifically pointed out/directed *the committee stating that it was the duty of the committee to have examined whether the conditions laid down in paragraph 3 and 4 of the OM dated 15.9.2017 have been complied with or not.*

The Hon'ble NGT has directed as below:

*We, therefore, direct the Committee to visit the site and prepare its report in considering the conditions laid down in paragraph 6 of the EC dated 20.03.2020 as well as the OM dated 15.09.2017 and the observations dated 04.12.2019 of the Regional Office of MoEF&CC and submit a fresh report within six weeks.*

**2) About the Visit and Scope :**

In view of the above direction, JSPCB being the nodal agency requested all the committee members to have a joint inspection (letter from the Member Secretary, JSPCB) vide letter no. B-2111, dated 03.12.2021 and further by the Regional Officer, Hazaribagh vide letter no. 41, Dated 21.01.2022 and vide letter no. 52 A, dated 29.01.2022 copy of letters enclosed as **Annexure IV**). All the members were also informed over on Mobile Phone but Sri Sharachchandra Lele, Ex member, EAC & Sri Rajiv Ranjan, Scientist-E, MOEF & CC, Ranchi did not respond to visit the Site. Later it was decided to visit the site on 03-04 Feb, 2022 by two members only namely Sh A K Yadav , Regional Officer, JSPCB, Hazaribagh and Dr G P Singh, Scientist-D, CPCB RD Kolkata and accordingly the fresh assessment report prepared by these two members is being submitted.



As desired by Hon'ble NGT the scope of this report consists of the following as detailed below:

- i. Point wise submission w.r.t. the order dated 17.11.2021
- ii. Compliance of Para 3 & 4 of Office Memorandum (OM) F. No. J-11015/224/2015-IA.II Dated 15th September, 2017(Annexure III).
- iii. Compliance of points mentioned in Paragraph 6 of the EC dated 20.3.2020.
- iv. Compliance status w.r.t. Show cause notice issued by MoEF&CC dated 12.12.2018.
- v. Compliance Status w.r.t verification Report of MoEF&CC Regional Office, Ranchi vide its Letter dated 4th December, 2019.

3) **Point wise submission w.r.t the order dated 17.11.2021 (Annexure II)**

Point no.	Direction as per Order dated 17.11.2021	Submission of the committee
1.	Mr. Saurabh Sharma, learned Counsel is present for the Appellant.	No comment
2.	Mr. Gora Chand Roy Choudhury, learned Counsel is present for Respondent No.1, Ministry of Environment, Forests and Climate Change, Mr. Surendra Kumar, learned Counsel is present for Respondent Nos. Central Pollution Control Board and Jharkhand State Pollution Control Board and Ms. Aishwarya Rajashree, learned Counsel is present for Respondent No.5, State of Jharkhand.	No comment
3	<b>A counter affidavit dated 7.9.2021 has been filed by the Jharkhand state pollution control board.</b>	No comment
4	The Committee in paragraph 1 of its report submits that the OM is a policy matter and therefore, its interpretation is also a policy and legal matter and no comments can be offered whereas the objection of the applicant was that public hearing has been illegally exempted therefore, it was the duty of the Committee to have examined whether the conditions laid down in paragraph 3 and 4 of the OM dated 15.09.2017 had been complied with or not. Having gone through those conditions, we find that they are not legal questions at all and should have been examined by the Committee.	All the conditions have been examined by the Committee and point wise compliance status of <b>point 3 and 4</b> of the OM dated 15.9.2017 has been tabulated in <b>point no. 4.0</b> below.
5	In paragraph 5 of the report, we find that with regard to transportation of coal conveyor system up to the silo and loading into railway wagons, and not by road," the Committee has reported that	The six points are mentioned in point no 3 stating <b>Summary of MoEF &amp; CC and JSPCB</b>



	<p>the silo and railway siding were not in existence in January, 2020 nor are in existence today. The company is using Shivpur railway siding located 6-7 km from the project to which the coal is sent by truck. The Committee also notes that the observations of the Regional Office of MoEF&amp;CC dated 04.12.2019 have partially not been complied with on 6 points. Which are those 6 points have not been disclosed.</p>	<p><b>prior to the NGT Committee's field visit</b> page 4 as below:</p> <ol style="list-style-type: none"> <li>i. Catch drains and toe walls around OB dump and catch drain around around coal dump</li> <li>ii. On the creation of an extra external Ob dump,</li> <li>iii. On the creation of avenue plantation/green belt</li> <li>iv. Contaminated run off flowing into Barki river/Dudhmatia nala</li> <li>v. Spontaneous combustion in coal dump, and</li> <li>vi. In adequacy of water sprinklers for controlling fugitive emissions</li> </ol>
<p><b>6</b></p>	<p>With regard to item no. 7 regarding road transportation of coal as primary cause in the increase of ground level concentrations of air pollutants in the ambient air surrounding coal mines, the Committee has noted that the EC dated 20.03.2020 has imposed conditions to mitigate air pollution from coal transport. There are other conditions mentioned in the EC like Air quality monitoring and preservation and green belt development which if complied with by the project proponent may result in minimizing/controlling dust/air pollution. Whether compliance of these conditions have been made by the project proponent or not has not been mentioned by the Committee. It appears that the Committee of Shri Rajeev Ranjan, Scientist E, IRO Ranchi, MoEF&amp;CC, Dr. G.P. Singh, Scientist D, CPCB, Kolkata, Dr. Sharachchandra Lele, Ex-member of EAC, Coal Mining and Shri A.K. Yadav, Regional Officer, Hazaribagh, JSPCB have neither visited the site nor applied their mind while preparing the report. The report does not disclose whether the Committee visited the site before preparing its report.</p>	<p>The site (Amrapali OCP) was visited by the committee on 1<sup>st</sup> September 2020. Which is mentioned in the report submitted by committee dated 14.9.2020 on page 2.</p> <p>In compliance to the order a fresh visit of the site was carried out on 04 Feb, 2022 by the committee consisting of members from CPCB and JSPCB only. As the members from MoEF &amp; CC, Ranchi &amp; Sri Sharachchandra Lele, Ex. Member, EAC did not attend and this report is being submitted by representative from CPCB and JSPCB.</p>



7	This report does not even bear a date and we find that the Committee members also have not noted any date on which this report was prepared and it is also not clear whether this report has been forwarded to the MoEF&CC and what action has been taken by the MoEF&CC with regard to non-compliance of the conditions of the EC as noted by the Regional Office of the MoEF&CC, vide their observations dated 04.12.2019.	<ul style="list-style-type: none"> <li>• Earlier the site was visited on 1<sup>st</sup> September 2020.</li> <li>• Report submitted on 14.9.2020</li> </ul>
8	Mr. Gora Chand Roy Choudhury, learned Counsel for the MoEF&CC does not have his file, is appearing physically and arguing from his mobile phone.	No Comment
9	We direct Mr. Gora Chand Roy Choudhury, to ensure in future that he carries his file with him and does not waste time for searching pages on the mobile phone.	No comment
10	We, therefore, direct the Committee to visit the site and prepare its report in considering the conditions laid down in paragraph 6 of the EC dated 20.03.2020 as well as the OM dated 15.09.2017 and the observations dated 04.12.2019 of the Regional Office of MoEF&CC and submit a fresh report within six weeks.	<ul style="list-style-type: none"> <li>○ The committee visited the site on 04 Feb, 2022.</li> <li>○ This report is prepared covering the paragraph 6 of the EC dated 20.3.2020 as detailed in <b>Point 5.0.</b> and OM dated 15.9.2017 detailed in <b>Point 4.0.</b></li> <li>○ Observation of Regional Office of MoEF&amp;CC dated 04.12.2019 is enclosed as <b>Annexure V</b></li> </ul>
11	The Committee shall also place before Court the observations of the Regional Office dated 4.12.2019	<b>The copy of Report is enclosed as Annexure V</b>

4) Compliance of Para 3 & 4 of Office Memorandum (OM) F. No. J-11015/224/2015-IA.II Dated 15<sup>th</sup> September, 2017( Annexure III).

a) **Compliance of Para 3 of OM**



S. NO	Conditions as per	Present status of observation	Complied / Not Complied / Partially Complied
<b>PARA 3</b>			
i	Predicted air quality parameters are within the prescribed norms.	No air quality monitoring was carried out by the committee however based on the air Quality monitoring report of the industry, Air quality parameters are within prescribed limits of Industry Specific limits and NAAQ Standard 2009.	Complied
ii	Coal transportation is through conveyor system up to the silo and then loading to railway wagons, involving no transportation through roads.	No conveyor system is still constructed in violation of the Environmental Clearance dated 03.01.2006 which clearly states that a CHP was to be constructed in an area of 20.33 ha along with a dedicated rail siding. The EC dated 03.01.2006 also clearly requires the construction of a CHP (Specific Condition xiv of the EC. It has been mentioned in the report point no 4.1.(1) page 5 submitted by the committee dated 14.9.2020  It has been reported that the work for construction of Railway siding has been awarded to M/s RITES Ltd dated 22.5.2017 ( <b>Annexure VIA</b> ) and for Coal Handling Plant(CHP) has been awarded to M/s Larsen and Turbo Limited on 31.12.2020 ( <b>Annexure VI B</b> )	Not complied <b>Gross violation</b>
iii	Coal mining is done through deployment of surface miners, replacing three dust generating operations of the conventional mining system namely drilling, blasting and crushing in one go.	<ul style="list-style-type: none"> <li>• Presently coal mining is done through deployment of 4 nos of surface miners at Amrapali OCP.</li> <li>• But it needs to be mentioned that surface miner is used for only coal cutting and the rest activity like loading, transportation is done using the conventional mining system i.e. loading by pay loaders and transportation by dumpers (<b>photographs Fig 1,2,3,4 Annexure XII</b>)</li> <li>• Conventional mining using drilling and blasting is still used for mining of coal which cannot be mined out using surface miners. (As reported around 1 % of the total coal is left in ribs is mined out using drilling blasting.</li> <li>• The over burden is removed using conventional drilling and blasting.</li> <li>• The three dust generating activities (drilling blasting and crushing) have not been replaced so far.</li> </ul>	Not yet complied as drilling blasting has not yet been replaced so far.
iv	Public hearing already conducted for	Public hearing for the project of 12 MTPA in an area of 1426.08 Ha was conducted on 02.04.2003 at Chatra, District: Chatra, Jharkhand.	Complied



	the total mine lease area involved and no more area is required for the proposed expansion.	Public Notice for EC Revalidation issued on 07.08.2019 in 3 newspapers in Hindi & English language. No more area is required for the expansion.	
v	Compliance status of EC conditions monitored by the concerned Regional Office of this Ministry is found to be satisfactory.	Based on the documents provided by CCL, observations by MoEF & CC Ranchi office in its previous inspections it has been reported that the compliance of proving Coal Handling Plant, Railway siding has not been ensured and also the dust generation has not been controlled properly. MoEF & CC Regional office and six-monthly compliance reports show there has been much delay in complying with the conditions relating to soil erosion and prevention of silt runoff from the overburden (OB) and top soil dumps.  EC conditions clearly require the construction of garland drains/catch drains and siltation pond around the coal dumps, coal yards and other such structures to prevent coal dust from entering streams and water bodies. It has been observed near the weigh bridge area (where coal bearing trucks are weighed and lot of coal spillages and heaps are observed) the runoff from such places carries the coal fines into the low-lying area and ultimately to river Barki. It has been reported in the report page 13 (point 4a)	<b>Non-Compliance</b>
vi	Other statutory requirements like Consent to Establish / Operate, Clearance from CGWA, approval of Mining Plan and the Mine Closure Plan, Mine Closure Status Report as applicable, Forest Clearance, etc. are satisfactorily fulfilled.	<ul style="list-style-type: none"> <li>o Consent to Establish of Amrapali OCP is obtained vide Ref No. 3502 dated 09.06.2003.</li> <li>o Consent to Operate of Amrapali OCP is obtained (14.4 MTPA) valid till 31.12.2022 vide ref no JSPCB/HO/RNC/CTO-10829845/ 2021/ 1692.</li> <li>o Mining Plan &amp; Mine Closure Plan of Amrapali OCP is approved on 04.11.2019 in the 479th Board meeting of CCL as informed.</li> <li>o Total forestland within the project area is 531.64 Ha for which Stage II Forest Clearance has been obtained vide letter no. 8-48/2008-FC on 12.10.2010.</li> <li>o It has been mentioned in the report that the project proponent has established a reasonable network of open wells and piezometers well around the mine since 2013 as such the project is in compliance with EC conditions regarding</li> </ul>	Complied



		ground water monitoring however, the project proponent should ensure that it sends ground water level and quality monitoring data to RO Ranchi of MoEF & CC in addition to other agencies as per EIA/EMP and rules (point 5 in the page 15 of the report. o	
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**b) Compliance of Para 4 of OM**

Sl no.	Conditions as per	Present status of observation	Compliance status/remarks if any
a)	The proposed expansion can go up to a maximum of 40% of capacity, wherein the last public hearing was conducted.	This proposal was for one time capacity expansion from 12.0 MTPA to 16.8 MTPA (40 %) in the existing coal mining operation.  The EC has been granted for 14.4 MTPA capacity which is 20% only vide No. J-11015/109/2003-IA-II (M) dated 20-03-2020( <b>Annexure VII</b> )	Complied
b)	There is no increase in area for the proposed expansion vis-à-vis the area in EC, wherein last public hearing was conducted.	There is no increase in existing project area of the mines wherein the last public hearing was conducted.	Complied
c)	Coal transport is through conveyor system up to the silo and loading to railway wagons, and not by road.	o No conveyor system is installed so far, the coal is still transported using dumpers i.e. ROAD which is in gross violation of this conditions (Fig 1, 4, 5 <b>Annexure XII</b> ) o Coal is loaded into wagons using pay-loaders, it is also in violation of the conditions  <i>The same is mentioned in the report as major issues in point 4.1(1) page 5</i>	<b>Non compliance</b>  (Gross violation)
d)	The EAC shall carry out the due diligence on all the parameters mentioned in para 3 above, and make its recommendations accordingly.	There are some contradictions in the submission of Project Proponent (PP) w.r.t. OM dated 15.9.2017 as well as EAC OM (point 2 53.7.3) requirements of the office memorandum states in point (Sr no 2.) "Coal transportation is through conveyor system up to silo and then	The non-compliances and Contradictory submission by EAC indicate that the work has not been carried out with



		<p><i>loading to railway wagons involving no transportation through roads."</i></p> <p>Whereas the <b>PP</b> states that it is <b>Compiled</b> and Railway siding is under implementation for coal transportation from Amrapali OCP for which work has been awarded to M/s RITES Ltd. After commission of this siding in FY 2022-23 there will be no transportation through road.</p> <p>At present the coal is being transported through tarpaulin covered trucks to nearby railway siding at 7 km.</p> <p>EAC while recommending in summary record of 53rd meeting of the Expert Appraisal Committee for Environmental Appraisal of Coal mining Projects constituted under the EIA Notification, 2006, held on 20th February, 2020 (<b>Annexure VIII</b>) states:</p> <ul style="list-style-type: none"> <li>○ <i>transportation of coal from coal handling plant shall be through covered trucks. (Point 53.7.4 (point iii))</i></li> <li>○ <i>PP shall implement input conveyor to railway through silo loading in three years (Point 53.7.4 (point v))</i></li> </ul> <p>When PP is not complying with point (C) how can it state it is complying? Also the EAC recommendation (53.7.4 (iii)) is in violation of the OM conditions in point (c).</p>	due diligence.
e)	EAC may consider the need for a third-party study through an expert agency in a time bound manner, after grant of EC."	PP has stated that a third-party assessment of EC compliance shall be undertaken in three years as recommended by EAC (point xiii of 53.7.4.)	

**5) Sub: Present status of Compliance of conditions mentioned in point 6 of Environmental clearance dated 20.3.2020( Annexure IV)**

Present status of the compliance of the conditioned mentioned while recommending the grant of EC for approval for expansion of Amrapali Opencast Coal mine from 12 MTPA to 14.1 MTPA (Peak) are tabulated below:



Point of EC	Conditions	Present status	Remarks if any
6(1)	EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.	No Comment	
6(2)	The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 14.4 MTPA (Peak) prior to commencement of the increased production.	The Project has obtained the CTE for the expanded Project.	complied
6(3)	Transportation of coal from Coal Handling Plant shall be through covered trucks.	Coal is being transported using dumper but no in covered trucks. Spillages were observed from the overloaded trucks.	Not Complied
6(4)	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.	No Coal Crusher and In-pit belt Conveyor has been installed.	Not Complied
6(5)	PP shall implement input conveyor to railway siding through silo loading in three years.	Though three years is yet to be completed but coal is still transported using dumpers.	
6(6)	Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.	Water & mist spraying arc being done all along the transportation rout from Coal dump to Shivpur Railway Siding as well as on haul road .by Tankers. 40 nos. of fixed water sprinklers have been installed along Shivpur Railway Siding  About 81400 nos of tree plantation	Complied.



		Mine lease area of 27 Ha as well as along Railway Siding, total on 35 Ha of land about 89000 of trees has been planted.	
6(7)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	Being complied as reported by PP in its MoEF &CC compliance report for April-21 – Sept 2021 ( <b>Annexure IX</b> )	
6(8)	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	Being complied as reported by PP in its MoEF &CC compliance report for April-21 – Sept 2021 ( <b>Annexure IX</b> )	
6(9)	Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.	<b>Partially complied</b> as reported by MoEF&CC , RO in site inspection report of Amrapali OCP dated 3.12.2021( <b>Annexure X</b> )	
6(10)	Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else what so ever and thus minimizing the dependability on a single source.	<b>Partially complied</b> as reported by MoEF&CC , RO in site inspection report of Amrapali OCP dated 3.12.2021( <b>Annexure X</b> )	
6(11)	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 14.4 MTPA (Peak)	The industry has got approval from CGWA for taking 4220 cubic meter per day.	Complied
6(12)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	Being complied as reported by PP in its MoEF&CC compliance report for April-21 – Sept 2021 ( <b>Annexure IX</b> )	Complied



6(13)	A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry	Yet to comply as reported	No progress
6(14)	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air borne of particles	<b>Partially complied</b> as reported by MoEF&CC , RO in site inspection report of Amrapali OCP dated 3.12.2021( <b>Annexure X</b> )	
6(15)	Compliance of the non-compliance/partial compliance conditions certified by Regional Office, Ranchi vide its Letter dated 4th December, 2019. The PP shall complete all noncompliance/partial compliance conditions in one year and the Action taken report shall be submitted to the Regional Office of the MoEF& CC	<b>Partially complied</b> as reported by MoEF&CC, RO in site inspection report of Amrapali OCP dated 3.12.2021 ( <b>Annexure X</b> ).	No compliance
6(16)	Project proponent to plant 100,000 nos of native trees with broad leaves along the villages and 50.000 nos of native trees along transportation route to prevent the effect of air pollution in 2 years. After completion of tree plantation number of trees shall be duly endorsed from Divisional Forest Officer.	<b>Partially complied</b> as reported in site inspection report of Amrapali OCP dated 3.12.2021 ( <b>Annexure X</b> )	Non compliance
6(17)	The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1 May, 2018.	No information provided.	
6(18)	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.	As reported complied	



6(19)	The Project Proponent shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	Reportedly complied.	
6(20)	Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.	NOC for Ground water Abstraction of 4220m <sup>3</sup> /day has been obtained.	Complied.
6(21)	Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly.  The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antisnake venom including all other	Reportedly being complied	



	paramedical safeguards may be ensured before initiating the mining activities.		
6(22)	Project Proponent shall follow the mitigation measures provided in Office Memorandum No. 2-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".	Reportedly being complied	
6(23)	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.	Reportedly being complied as reported	
6(24)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.	Complied	
6(25)	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental	Reportedly being complied as reported in (EC compliance report.).	



	clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.		
6(26)	Amrapali Railway siding shall be completed in 3 years and road transportation to Balumath railway siding will be stopped accordingly.	Railway siding awarded in the year 2017 (22.5.2017 copy enclosed as <b>Annexure VIA</b>	Non compliance
6(27)	The distance of atleast 100 m shall be kept from Barki River and Bahut Chuha nala with no mine water discharge.	Reportedly complied	
6(28)	Project Proponent shall comply to the observation in show cause notice dated 12th December, 2018 regarding non-compliance of earlier EC and necessary report should be submitted to the Regional Office, Ranchi within stipulated time.	As reported by MoEF&CC compliance status report submitted on 3.12.2021 many of the conditioned of EC dated 20.3.2020 are still partially complied ( <b>Annexure X</b> )	

**6) Compliance status w.r.t. Show cause notice issued by MoEF&CC dated 12.12.2018**

Based on the report of Regional Office, Ranchi of MoEF& CC dated 3.12.2021 many of the conditions are still not complied (Annexure X).

**7) Inspection Report of MoEF&CC Regional Office, Ranchi vide its Letter dated 4<sup>th</sup> December, 2019. Enclosed as Annexure V**

**8) Over all observations**

Based on the above it has been observed as follows:



- 8.1 The committee does not agree with the views of the Expert Appraisal Committee (EAC) appraising the fulfillment of certain requirement (Sl No. 2 & 3) as reported in the Summary record of 53<sup>rd</sup> Meeting of the Expert Appraisal committee for Environmental Appraisal of Coal Mining Projects meeting held on 20.2.2020 (**Annexure VIII**) as the submission of the PP in compliance to the Office memorandum J11015/224/2015 IA.II dated 15.9.2017 tabulated on (Sl no 2 and 3 in Page 39 of 101 draft minutes of 53<sup>rd</sup> meeting 20.3.2020 **Annexure VIII**) are not in line with the requirement of the Office Memorandum also detailed in point 4 of this report.
- 8.2 As per the OM dated 15.9.2017 Environmental Clearance for Expansion of coal Mining projects exemption from public hearing is subject to fulfillment of certain requirements stated in para 3 and para 4 however the present status as observed during inspection is that
- i. Neither conveyor system nor any silos are installed so far,
  - ii. 100 % of coal is still being transported through road using dumpers.
  - iii. Conventional mining using drilling blasting is used for Overburden as well as the coal which reportedly cannot be mined out using surface miners (it accounts for around 1 % of total coal as reported).
  - iv. Work order for Amrapali OCP siding of CCL was awarded in the year 2017 (**Annexure VIA**) but still it is not completed.
  - v. The work order for Coal Handling Plant (CHP) has been awarded to M/s Larsen and Toubro Limited on 31.12.2020 (letter of acceptance of order is Enclosed as **Annexure VIB**)
- 8.3 The observations of Regional Office of MoEF&CC dated 04.12.2019 which were to be complied within one year is still not fully complied.

#### 9) **Recommendations:**

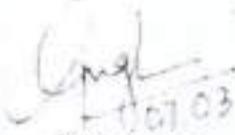
Based on the above it is recommended as follows:

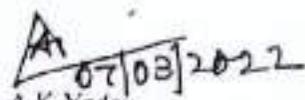
- 9.1 It should be ensured that the EAC should carry out the appraisal for fulfillment of conditions mentioned in the OM dated 2017 with due diligence to ensure compliance of conditions to meet the objective for which these conditions have been stated in OM.
- 9.2 It should be ensured by Project Proponent that the while submitting any compliance status report w.r.t. the conditions of OM /EC/CTO/Directions etc the submission are in line with the specific conditions and must not deviate from the exact condition to hide the non-compliances w.r.t. that specific conditions.



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- 9.3 The industry should ensure compliance of all the conditions mentioned OM dated 15.9.2017 as well as EC dated 20.3.2020 and the observations of Regional Office of MoEF&CC dated 04.12.2019 at the earliest.
- 9.4 Mining authority should also ensure compliance of Hon'ble NGT order (OA 284/2019 dated 19.9.2019) to prevent spillages from the coal transportation. The order states that a minimum free on board (preferably not less than 5 cm) should be maintained in all the loaded vehicles along with proper covering.

  
07/03/2022  
Dr G P Singh  
Scientist D, CPCB Kolkata

  
07/03/2022  
A K Yadav  
Regional Officer, JSPCB Hazaribagh



**Enclosures:**

Sl no.	Particulars	Annexure
i.	Affidavit by JSPCB dated 07.09.2021	I
ii.	Order of the Hon <sup>ble</sup> NGT dated 17.11.2021	II
iii.	Office Memorandum dated 15.9.2017	III
iv.	MS JSPCB & RO, JSPCB letters for inspection by the committee	IV
v.	Inspection Report of MoEF&CC Regional Office, Ranchi vide its Letter dated 4th December, 2019	V
vi.	Copy of work Order for Railway siding	VIA
vii.	Copy of work order for Coal handling Plant (CHP) dated 31.12.2020	VIB
viii.	The EC dated 20-03-2020	VII
ix.	Summary record of 53 <sup>rd</sup> meeting of Expert Appraisal committee for Environmental appraisal of Coal mining Projects constituted under the EIA Notification ,2006 meeting held on 20.02.2020	VIII
x.	EC compliance report submitted by Project Proponent dated 11.12.2021	IX
xi.	Site inspection report of Amrapali Opencast Coal mine from 14.4 MTPA to 20.16 MPPA(Peak) dated 03.12.2021	X
xii.	Plantation Details	XI
xiii.	Photographs taken at the time of inspection	XII



601 (34) (28)

BEFORE THE NATIONAL GREEN TRIBUNAL, KOLKATA

Appeal No: 06 of 2020 (EZ)

Sanjay Chauhan

Applicant

Vs.

Union of India & Ors.

Respondents

INDEX

Sl. No.	Particulars	Page No.
1.	Counter Affidavit on Behalf of Respondent No. - 4	95-98
2.	Annexure - I: The Photocopy of the Report submitted by the four (4) member committee.	99-103
3.	Annexure - II: The Photocopy of the Report submitted in Hon'ble NGT via email dated 07.01.2021.	104

Filed By: -

Surendra Kumar  
Advocate

Jharkhand State Pollution Control Board



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and Notaries Rules 1956 by  
Govt. of India (Jharkhand)

BEFORE THE NATIONAL GREEN TRIBUNAL KOLKATA

Appeal No. 06 of 2020 (EZ)

Sanjay Chauhan

Applicant

Vs.

Union of India & Ors. Respondents

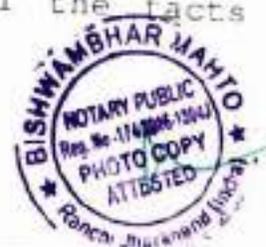
07 SEP 2021

Ref. No. 39 Date

Counter Affidavit on behalf of Respondent  
No4Jharkhand State Pollution Control Board. In  
compliance of order dated 06.08.2021.

I Yatindra Kumar Das, son of Late K.K.Das presently  
posted as Member Secretary, Jharkhand State  
Pollution Control Board, H.E.C, Dhurwa, Ranchi, and  
am duly authorized and here by solemnly state and  
affirm as follows :-

1. That at present, I am working and posted as  
Member Secretary, Jharkhand State Pollution  
Control Board, H.E.C, Dhurwa, Ranchi and as  
such, I am well acquainted with all the facts  
circumstances of this case



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2. That I have gone through the order dated 06.08.2021 passed by Hon'ble NGT and have understood the contents therein.

3. That, I have been authorized to swear this affidavit on behalf of the Respondent No-5, Jharkhand State Pollution Control Board by the competent authority. Further it is stated that I have gone through the relevant files and records.

4. That, it is humbly stated and submitted that the four (4) Member-Committee had been constituted as a fact finding in the light of the directions issued by the Hon'ble NGT in the order dated 28.010.2020. in O.A No. 28/2020 (EZ), the committee was directed to find out the facts and to consider the questions raised in the Appeal as the two matter are interconnected.

5. That, it is humbly stated and submitted that some of the points raised by the Appellant in this Appeal No. 06/2020/EZ are matters of legal interpretation or policy positions, or of conclusions drawn by the Expert Appraisal

07 SEP 2021



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Committee (EAC) based on the materials at its disposal, and as such outside the purview of this Committee, which was constituted as Fact-Finding Committee.

6. That, it is humbly stated and submitted that the Committee perused the latest Environment Clearance (EC) No. J-11015/109/2003-IA-II(M) dated 20.03.2020 to the Amrapali Opencast Mine, M/s Central Coalfields Limited (CCL) and commented on the points based on the facts observed by the Committee.

Photocopy of the report submitted by the Four (4) Member Committee via email dated 15.12.2019 is annexed and marked as Annexure-I.

7. That, it is humbly stated and submitted that the Jharkhand State Pollution Control Board (JSPCB), Ranchi being the Nodal Agency have filed the Committee's report via email dated 07.01.2021.

07 SEP 2021



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Photocopy of the report  
Submitted in Hon'ble NGT  
via email dated 07.01.2021  
is annexed and marked as  
Annexure-II

8. That the statement made in forgoing paragraphs  
are true to my knowledge in annexure are true  
copy of its original.

*Mahto*  
DEPONENT

**VERIFICATION:**

Verified at Ranchi on this theday of  
.....August, 2021 that the averments & facts  
stated herein above are true and correct to my  
knowledge and belief and nothing material has  
been concealed therefrom.

*Mahto*  
DEPONENT



07 SEP 2021

07-09-21  
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**Signature attested on  
Identification of Lawyer**



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**Report of the committee in Appeal No. 06/2020/EZ (I.A No. 55/2020 & I.A. No. 56/2020) as per the orders of Hon'ble NGT dated 28.10.2020.**

This is with reference to the Appeal No. 06/2020/EZ (I.A No. 55/2020 & I.A. No. 56/2020) BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI in the matter of Sanjay Chauhan (Appellant) Versus Union of India & Ors. (Respondent (s)).  
 Date of hearing: 28.10.2020.

This is an Appeal filed by the Appellant against the Environmental Clearance (EC) dated 20.03.2020 granted by the Ministry of Environment, Forests and Climate Change (MoEF&CC) in favour of M/s. Central Coalfields Limited for the expansion of the Amrapali Opencast Coal Mine located in Chatra District, Jharkhand from 12 MTPA to 14.4 MTPA in which an area of 619.87 ha, including 531.64 ha of forest land is involved.

In response Hon'ble NGT ordered that "In the O.A., a Committee has been constituted comprising of (i) the Regional Office, MoEF&CC, Ranchi; (ii) the Regional office, CPCB, Kolkata; (iii) the Jharkhand State Pollution Control Board (State PCB) and, (iv) Dr. Sharad Lele, Member of the Expert Appraisal Committee, MoEF&CC. Therefore the Committee may also consider the *questions raised in the present Appeal as the two matters are inter-connected.*" (emphasis added).

In response to the NGT's order, this committee conferred via video conference, and submits this report. It may be noted that some of the points raised by the appellant in this appeal No. 06/2020/EZ are matters of legal interpretation or policy positions, or of conclusions drawn by the EAC based on material at its disposal, and as such outside the purview of this committee, which was constituted as a fact-finding committee. We have noted the same below where applicable, commenting only on the facts as observed by us.

Points raised by the appellant are:

1. Public Hearing has been illegally exempted by relying upon the Office Memorandum dated 15.09.2017.
2. An Office Memorandum cannot circumvent and override the provisions of the EIA Notification, 2006



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3. Earlier Public Hearing was conducted as per the EIA Notification, 1994, and its minutes have not been considered by the EAC while recommending the Project.
4. The second component of the Public Consultation process has also not been complied.
5. The Project does not meet the requirement of the OM dated 15.09.2017
6. No Cumulative Impact Assessment has been carried out
7. Road transportation of coal is one of the primary causes in the increase of ground level concentrations of air pollutants in the ambient air surrounding coal mines.
8. Violation of the Condition of the Previous EC dated 03.01.2006
9. Inadequate Appraisal by the EAC.

The committee members perused the latest EC (no. J-11015/109/2003-1A-II-(M) dated 20.03.2020 to the Amrapali Opencast Coal Mine, M/s CCL, in state Jharkhand. The points of the EC that may be relevant to the issues raised by the petitioner are given below:

1. **Public Hearing has been illegally exempted by relying upon the Office Memorandum dated 15.09.2017:** In the para 5 of the EC dated 20.03.20 it is mentioned that "The sectoral Expert Appraisal Committee after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and consideration of the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017, exempted the project from public hearing, and recommended for grant of Environment Clearance". As the OM is a policy matter, and its interpretation is also a policy and legal matter, this committee would not like to offer any further comments on this issue.
2. **An Office Memorandum cannot circumvent and override the provisions of the EIA Notification, 2006:** As this is a policy matter, this committee would not like to offer any comments /remarks on this issue.
3. **Earlier Public Hearing was conducted as per the EIA Notification, 1994, and its minutes have not been considered by the EAC while recommending the Project** and
4. **The second component of the Public Consultation process has also not been complied.:** It is mentioned in the EC of March 2020 in Para 3 (xxi) that "Public hearing for the project of 12 MTPA capacity in an area of 1426.08 Ha was conducted on 02.03.2003. Major issues raised in the public hearing include mitigation of air &

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Reg No 174/2016-106A/1  
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Ranchi, Jharkhand (India)

SUNJAY KUMAR  
NOTARY

water pollution, compensation, employment opportunity, medical facilities & provision of drinking water etc. Appropriate action to address the issues raised in the Public Hearing have already been taken'. We do not have any more information, nor do we know what is meant by the 'second component' that the petitioner is referring to.

5. **The Project does not meet the requirement of the OM dated 15.09.2017:** The OM dt. 15.09.2017 states (para 4) that the Ministry shall consider proposals for grant of EC ... providing exemption from public hearing ... subject to the conditions... [including] condition (c) "Coal transport is through conveyor system up to the silo and loading into railway wagons, and not by road". As this committee's report dt. 14 Sep 2020 clearly observes on page 6 (para 4.1(i)), the silo and railway siding were not in existence in January 2020, nor are in existence today. (The company is currently using Shivpur railway siding, located 6-7 km from the project), to which coal is sent by truck.) Similarly, the OM requires that 'compliance status of EC conditions is found to be satisfactory'. Again, as noted in this committee's report of 14 Sep 2020 (para 3, page 4), as per the revised observations dt. 4.12.2019 of the Regional Office of MOEFCC, there was partial non-compliance on 6 points.

We note that the EC dt. 20.03.20 has imposed the following conditions in this connection: "The Expert appraisal Committee in 53<sup>rd</sup> meeting held on 20<sup>th</sup> February, 2020 has recommended the project for grant of Environment Clearance. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval for expansion of Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand), ... subject to the compliance of the following terms & conditions/specific conditions ... [including]:

- Condition no. 6 (iii) Transportation of Coal from Handling Plant shall be through covered trucks.*
- Condition no. 6 (iv) To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.*
- Condition no. 6 (v) PP shall implement inpit conveyor to railway siding through silo loading in three years.*
- Condition no. 6 (vi) Mitigating measures shall be undertaken to control dust and other fugitive emission all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which whuld include mechanized sweeping, water sprinkling/mist spraying on haul roads and loads.*



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*long range misting/fogging arrangement, wind barrier was and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points etc."*

6. **No Cumulative Impact Assessment has been carried out:** To the best of this committee's knowledge, no Cumulative Impact Assessment has been carried out. But the committee is also not aware of any such requirement being imposed on this project or more generally.
7. **Road transportation of coal is one of the primary causes in the increase of ground level concentrations of air pollutants in the ambient air surrounding coal mines:**  
The statement by the appellant is of a general nature. Specifically regarding Amrapali OCP, this committee, in its report dt. 15.09.2020 (para 4.1(1), page 7) observed 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 ... In the dry season, this dust will also create serious air pollution. It may be noted that there are some settlements on the way" As noted above, the EC dt.20.03.20 has imposed conditions to mitigate air pollution from coal transport (see conditions 6(iii), 6(iv), 6(v) and 6(vi) quoted above.). There are other conditions mentioned in the EC like Air quality monitoring and preservation and green belt development that if complied by PP may result in minimizing/controlling, dust/air pollution.
8. **Violation of the Condition of the Previous EC dated 03.01.2006:** As noted in point 5 above, there was non-compliance or partial compliance with certain conditions of the EC as of Dec 2019, prior to the application for expansion. Furthermore, EC dt.20.03.20 mentions in para 6 Condition no. 6 (xv) that "Compliance of the non-compliance/partial compliance conditions certified by Regional Office, Nagpur (Ranchi) vide its letter dated 4<sup>th</sup> December, 2019. The PP shall complete all non-compliance/partial compliance conditions in one year and the Action taken report shall be submitted to the Regional Office of the MoEF&CC".
9. **Inadequate Appraisal by the EAC:** This committee, being a fact-finding committee regarding the situation in the mining area, is not in a position to judge or pass comment on what information was at the disposal of the EAC and what appraisal it carried out.



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(It may be noted that Dr. Lele, although a member of the EAC at that time, did not participate in the particular EAC meeting (meeting of 20<sup>th</sup> February 2020) in which the Amrapali OCP Expansion proposal was deliberated upon.)

The committee members have tried to answer the issues raised by Appellant pointwise with the help of the documents and factual information available to it.

Shri. Rajeev Ranjan  
Scientist E, IRO Ranchi, MOEFCC

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

Dr. Sharachchandra Lele  
Ex-member of EAC, Coal Mining

Shri. A K Yadav  
Regional officer, Hazaribagh, JSPCB



Item No. 04

Court No.1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA  
(Through Video Conferencing)**

Appeal No. 6/2020/EZ  
(I.A. No. 55/2020/EZ & I.A. No. 56/2020/EZ)

Sanjay Chauhan Appellant(s)  
Versus  
Union of India & Ors. Respondent(s)  
Date of hearing: 17.11.2021

**CORAM: HON'BLE MR. JUSTICE B. AMIT STHALEKAR, JUDICIAL MEMBER  
HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER**

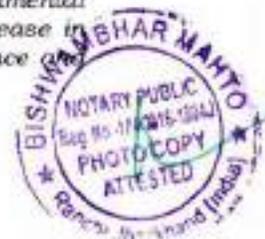
For Appellant(s) : Mr. Saurabh Sharma, Advocate

For Respondent(s) : Mr. Gora Chand Roy Choudhury, Advocate for R-1,  
Mr. Surendra Kumar, Advocate for R-3 & 4,  
Ms. Aishwarya Rajashree, Advocate for R-5

**ORDER**

1. Mr. Saurabh Sharma, learned Counsel is present for the Appellant.
2. Mr. Gora Chand Roy Choudhury, learned Counsel is present for Respondent No.1, Ministry of Environment, Forests and Climate Change, Mr. Surendra Kumar, learned Counsel is present for Respondent Nos. Central Pollution Control Board and Jharkhand State Pollution Control Board and Ms. Aishwarya Rajashree, learned Counsel is present for Respondent No.5, State of Jharkhand.
3. A counter affidavit dated 07.09.2021 has been filed by the Jharkhand State Pollution Control Board along with report, same is taken on record. We find that this report is absolutely half-hearted and slipshod. The OM dated 15.11.2017 provides for grant of exemption for public hearing while granting EC and in case of exemption from public hearing, this exemption is not absolute but comes with certain conditions which are mentioned in the office memorandum itself in paragraph 3 and thereafter paragraph 4 which reads as under:

*\*3. The request of Ministry of Coal was considered by the Expert Appraisal Committee (EAC) in the Ministry constituted for appraisal of projects relating to Thermal and Coal sectors. The Committee has recommended for exemption from public hearing while considering grant of environmental clearances to the expansion project of coal mines, involving increase in production capacity up to 40% in 2-3 phases after the due diligence and subject to fulfillment of certain requirements as under:*



- (i) Predicted air quality parameters are within the prescribed norms.
- (ii) Coal transportation is through conveyor system up to the silo and then loading to railway wagons, involving no transportation through roads.
- (iii) Coal mining is done through deployment of surface miners, replacing three dust generating operations of the conventional mining system namely drilling, blasting and crushing in one go.
- (iv) Public hearing already conducted for the total mine lease area involved and no more area is required for the proposed expansion.
- (v) Compliance status of EC conditions monitored by the concerned Regional Office of this Ministry is found to be satisfactory.
- (vi) Other statutory requirements like Consent to Establish/Operate, Clearance from CGWA, approval of Mining Plan and the Mine Closure Plan, Mine Closure Status Report as applicable, Forest Clearance, etc. are satisfactorily fulfilled.

4. In view of the aforesaid recommendations by EAC, the Ministry has decided to consider the proposals for grant of EC to the expansion of coal mining projects providing exemption from public hearing, in the manner and/or subject to the conditions as under:-

- a) The proposed expansion can go up to a maximum of 40% of capacity, wherein the last public hearing was conducted.
- b) There is no increase in area for the proposed expansion vis-à-vis the area in EC, wherein last public hearing was conducted.
- c) Coal transport is through conveyor system up to the silo and loading to railway wagons, and not by road.
- d) The EAC shall carry out the due diligence on all the parameters mentioned in para 3 above, and make its recommendations accordingly.
- e) EAC may consider the need for a third party study through an expert agency in a time bound manner, after grant of EC."

4. The Committee in paragraph 1 of its report submits that the OM is a policy matter and therefore, its interpretation is also a policy and legal matter and no comments can be offered whereas the objection of the applicant was that public hearing has been illegally exempted therefore, it was the duty of the Committee to have examined whether the conditions laid down in paragraph 3 and 4 of the OM dated 15.09.2017 had been complied with or not. Having gone through those conditions, we find that they are not legal questions at all and should have been examined by the Committee.

5. In paragraph 5 of the report, we find that with regard to transportation of "coal conveyor system up to the silo and loading into railway wagons, and not by road," the Committee has reported that the silo and railway siding were not in existence in January, 2020 nor are in existence today. The



614

company is using Shivpur railway siding located 6-7 km from the project to which the coal is sent by truck. The Committee also notes that the observations of the Regional Office of MoEF&CC dated 04.12.2019 have partially not been complied with on 6 points. Which are those 6 points have not been disclosed.

6. With regard to item no. 7 regarding road transportation of coal as primary cause in the increase of ground level concentrations of air pollutants in the ambient air surrounding coal mines, the Committee has noted that the EC dated 20.03.2020 has imposed conditions to mitigate air pollution from coal transport. There are other conditions mentioned in the EC like Air quality monitoring and preservation and green belt development which if complied with by the project proponent may result in minimizing/controlling, dust/air pollution. Whether compliance of these conditions have been made by the project proponent or not has not been mentioned by the Committee. It appears that the Committee of Shri Rajeev Ranjan, Scientist E, IRO Ranchi, MoEF&CC, Dr. G.P. Singh, Scientist D, CPCB, Kolkata, Dr. Sharachchandra Lele, Ex-member of EAC, Coal Mining and Shri A.K. Yadav, Regional Officer, Hazaribagh, JSPCB have neither visited the site nor applied their mind while preparing the report. The report does not disclose whether the Committee visited the site before preparing its report.
7. This report does not even bear a date and we find that the Committee members also have not noted any date on which this report was prepared and it is also not clear whether this report has been forwarded to the MoEF&CC and what action has been taken by the MoEF&CC with regard to non-compliance of the conditions of the EC as noted by the Regional Office of the MoEF&CC, vide their observations dated 04.12.2019.
8. Mr. Gora Chand Roy Choudhury, learned Counsel for the MoEF&CC does not have his file, is appearing physically and arguing from his mobile phone.
9. We direct Mr. Gora Chand Roy Choudhury to ensure in future that he carries his file with him and does not waste time for searching pages on the mobile phone.



- 10. We, therefore, direct the Committee to visit the site and prepare its report in considering the conditions laid down in paragraph 6 of the EC dated 20.03.2020 as well as the OM dated 15.09.2017 and the observations dated 04.12.2019 of the Regional Office of MoEF&CC and submit a fresh report within six weeks.
- 11. The Committee shall also place before Court the observations of the Regional Office dated 04.12.2019.
- 12. **List on 10.01.2022.**

.....  
**B. Amit Sthalekar, JM**

.....  
**Saibal Dasgupta, EM**

November 17, 2021  
Appeal No. 6/2020/EZ  
(I.A. No. 55/2020/EZ &  
I.A. No. 56/2020/EZ)  
MN



F. No.J-11015/224/2015-IA.II  
Government of India  
Ministry of Environment, Forest and Climate Change  
(IA-II Section)

Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi - 3  
Dated: 15<sup>th</sup> September, 2017

**Office Memorandum**

**Sub: Environmental Clearance for expansion of Coal Mining Projects - Exemption from Public hearing - reg.**

In order to facilitate grant of Environmental Clearance (EC) to the expansion projects of coal mines, Office Memorandums have been issued by this Ministry from time to time providing exemption from public hearing.

2. Ministry of Coal in order to allow rapid expansion in coal production has made request for further dispensation in public hearing to expedite Environmental Clearances.

3. The request of Ministry of Coal was considered by the Expert Appraisal Committee (EAC) in the Ministry constituted for appraisal of projects relating to Thermal and Coal sectors. The Committee has recommended for exemption from public hearing while considering grant of environmental clearances to the expansion projects of coal mines, involving increase in production capacity up to 40% in 2-3 phases after the due diligence and subject to fulfilment of certain requirements as under:-

- (i) Predicted air quality parameters are within the prescribed norms.
- (ii) Coal transportation is through conveyor system up to the silo and then loading to railway wagons, involving no transportation through roads.
- (iii) Coal mining is done through deployment of surface miners, replacing three dust generating operations of the conventional mining system namely drilling, blasting and crushing in one go.
- (iv) Public hearing already conducted for the total mine lease area involved and no more area is required for the proposed expansion.
- (v) Compliance status of EC conditions monitored by the concerned Regional Office of this Ministry is found to be satisfactory.
- (vi) Other statutory requirements like Consent to Establish/Operate, Clearance from CGWA, approval of Mining Plan and the Mine Closure Plan, Mine Closure Status Report as applicable, Forest Clearance, etc are satisfactorily fulfilled.

*SKD*



4. In view of the aforesaid recommendations by EAC, the Ministry has decided to consider the proposals for grant of EC to the expansion of coal mining projects providing exemption from public hearing, in the manner and/or subject to the conditions as under:-

- (a) The proposed expansion can go up to a maximum of 40% of capacity, wherein the last public hearing was conducted.
- (b) There is no increase in area for the proposed expansion vis-a-vis the area in EC, wherein last public hearing was conducted.
- (c) Coal transport is through conveyor system up to the silo and loading to railway wagons, and not by road.
- (d) The EAC shall carry out the due diligence on all the parameters mentioned in para 3 above, and make its recommendations accordingly.
- (e) EAC may consider the need for a third party study through an expert agency in a time bound manner, after grant of EC.

5. This OM shall be in supersession of the earlier OMs issued by the Ministry as under:

- (i) OM No. J-11015/30/2004-IA.II (M) dated 19<sup>th</sup> December, 2012
- (ii) OM No. J-11015/30/2004-IA.II (M) dated 7<sup>th</sup> January, 2014
- (iii) OM No. J-11015/30/2004-IA.II (M) dated 30<sup>th</sup> May, 2014
- (iv) OM No. J-11015/30/2004-IA.II (M) dated 28<sup>th</sup> July, 2014
- (v) OM No. J-11015/30/2004-IA.II (M) dated 2<sup>nd</sup> September, 2014

6. This issues with approval of the competent authority.

S.K.  
15/9/2017  
(S.K.Srivastava)  
Scientist E





# JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004  
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

ANNEXURE - IV

618  
35

By Email

Hon'ble NGT Matter  
Time Bound (Urgent)

Ref. No... B-211

Ranchi, Dated... 03.12.2021

From,

Yatindra Kumar Das,  
Member Secretary.

To,

Dr. Sharachchandra Lele,  
Member EAC, MoEF&CC.

Sri Rajeev Ranjan  
Scientist E/Additional Director,  
MoEF&CC Regional Office (ECZ), Ranchi.

Sri G.P. Singh  
Scientist D,  
CPCB Regional Directorate, Kolkata.

**Sub: Compliance of the Hon'ble NGT, EZB, Kolkata order dated 17/11/2021 in Appeal No. - 6/2020 (EZ) in the matter of Sanjay Chauhan vs. Union of India & ors. - Regarding.**

Sir,

With reference to the subject noted above, it is to inform you that the Hon'ble NGT, EZB, Kolkata has passed an order dated 17/11/2021 in Appeal No. - 6/2020 (EZ) in the matter of Sanjay Chauhan vs. Union of India & ors (copy enclosed). The operative part of which is as below: -

*"10. We, therefore, direct the Committee to visit the site and prepare its report in considering the conditions laid down in paragraph 6 of the EC dated 20.03.2020 as well as the OM dated 15.09.2017 and the observations dated 04.12.2019 of the Regional Office of MoEF&CC and submit a fresh report within six weeks.*

*11. The Committee shall also place before Court the observations of the Regional Office dated 04.12.2019."*

In light of the above, it is further informed that Sri A. K. Yadav, Regional Officer, JSPCB Regional Office, Hazaribagh (7250218115; Email: - jspcb\_hazaribagh@rediffmail.com) is nominated as the member of the committee on behalf of JSPCB to look into this matter. This is for your information and necessary action please.

Thanking You.

Encl: As above.

Yours sincerely,

Sd/-

(Yatindra Kumar Das)  
Member Secretary

Memo No... B-211

Ranchi, dated... 03.12.2021

Copy to: The Regional Officer, Regional Office, Hazaribagh for information and you are directed to coordinate with the committee members for inspection and submit the inspection report w.r.t. Hon'ble NGT directions as soon as possible so that it may be filed before the Hon'ble Tribunal in time.



(Yatindra Kumar Das)  
Member Secretary



क्षेत्रीय कार्यालय सह प्रयोगशाला,  
झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद,  
पी०टी०सी० चौक, मटवारी रोड, हजारीबाग।

619

Ref.no. 41

Dated 21-01-2022

From,

**Ashok Kumar Yadav**

Regional Officer

To,

Dr. GP Singh, Scientist D, ERD Kolkata/  
Sri Rajiv Ranjan Scientist - E, Regional Office, MOEF & CC, Ranchi/  
Dr. Sarachchandra Lele, Ex- Member FAC.

Sub: Regarding inspection of M/s Amrapali OCP, Tandwa, Distt- Chatra in the light of Hon'ble NGT Order dated 17.11.2021 in appeal no. 06.

Sir,

As per the point no 10 of Hon'ble NGT Order dated 17.11.2021 the committee is directed to visit the Site and prepare its report in considering the conditions laid down in paragraph 6 of the EC dated 20.03.2020 as well as the OM dated 15.09.2017 and the observations dated 04.12.2019 of the Regional Office, MOEF & CC and submit a fresh report within six weeks. In the light of the above the date of inspection has been decided on 27-28 January, 2022.

It is therefore requested to inspect the site. So that report may be sent within time.

Thanking You.

Yours faithfully,

A.K. Yadav, RO, JSPCB.





620

क्षेत्रीय कार्यालय सह प्रयोगशाला,  
झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद,  
पी०टी०सी० चौक, मटवारी रोड, हजारीबाग।

Ref.no..S2A..

Dated...29/1/22

From,

Ashok Kumar Yadav  
Regional Officer

To,

Dr. GP Singh, Scientist D, ERD Kolkata/  
Sri Rajiv Ranjan Scientist -E, Regional Office, MOEF & CC, Ranchi/  
Dr. Sarachchandra Lele, Ex- Member EAC.

Sub: Regarding inspection of M/s Amrapali OCP, Tandwa, Distt- Chatra in the light of Hon'ble NGT Order dated 17.11.2021 in appeal no. 06.  
Ref. Letter no. 41 dated 21.01.2022 of this office.

Sir,

As per the point no 10 of Hon'ble NGT Order dated 17.11.2021 the committee is directed to visit the Site and prepare its report in considering the conditions laid down in paragraph 6 of the EC dated 20.03.2020 as well as the OM dated 15.09.2017 and the observations dated 04.12.2019 of the Regional Office . MOEF & CC and submit a fresh report within six weeks. In the light of the above the date of inspection again has been decided on 03 - 04 February, 2022.

It is therefore requested to inspect the site. So that report may be sent within time.

Thanking You.

Yours faithfully,  
A.K Yadav, RO, JSPCB.





Government of India / भारत सरकार  
 Ministry of Environment, Forest & Climate Change  
 पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
 Regional office (Eastern Central Zone) / (पूर्वी मध्य क्षेत्रीय कार्यालय)  
 Bungalow No.A-2, Shyamli colony, Ranchi - 834002  
 बंगला सं.ए.2-श्यामली कालोनी, राँची 834002 -  
 Tel: 0661-2410007, 2410002, E-mail: [ro.ranchi-mef@gov.in](mailto:ro.ranchi-mef@gov.in)



No.103-80/05/EPE/3638

Dated: 04.12.2019

To,

Scientist 'E',  
 Monitoring Cell,  
 Impact Assessment division,  
 Vayu Wing, 3<sup>rd</sup> Floor,  
 Ministry of Environment, Forest and Climate Change,  
 Indira Paryavaran Bhavan, Jorbagh Road,  
 Aliganj, New Delhi-110003

**Sub: Updated observations and remarks of Regional office, Ranchi on the basis of site inspection and reply/ action taken report of Amrapali OCP of M/s Central Coalfields Ltd located in Tehsil Pachwara Block District Chatra, Jharkhand.**

**Ref:** 1. Ministry's Clearance letter no. J-11015/544/2009-IA.II(M) dated 24.12.2014.  
 2. Regional Office Ranchi's letter no. 103-80/05/EPE/2596 dated 14.09.2018  
 3. Ministry's show cause letter no. J-11013/100/2018-IA-I (M) dated 12.12.2018.  
 4. Project Proponent's letter no. PO/Amrapali OC/ Forest/2018-19/2139 dated 08.01.2019 and letter no. PO/Amrapali OC/Env/2019-20/1611 dated 04.11.2019 and email dated 04.12.2019.

Madam/Sir,

I am directed to inform that Amrapali OCP of M/s Central Coalfields Ltd located in District Chatra, Jharkhand was monitored by Regional Office Ranchi on 19.12.2017 and major observations of the monitoring report were communicated to MoEF&CC, New Delhi vide letter no. 103-80/05/EPE/2596 dated 14.09.2018. These included some points of non-compliance and partial compliances against the Environmental Clearance conditions.

Under section 5 of Environment (Protection) Act, 1986, MoEF&CC, New Delhi had issued show cause notice vide letter no. J-11013/100/2018-IA I (M) dated 12.12.2018 to Amrapali OCP by M/s Central Coalfields Limited regarding non-compliances/ partial compliances of Environmental conditions contained in the Environmental Clearance.

Project Proponent vide their letter no. PO/Amrapali OC/ Forest/2018-19/2139 dated 08.01.2019 submitted action taken report in respect of the show cause notice. The project was again inspected/monitored on 11.09.2019. Further, Project Proponent also submitted additional documents vide letter no. PO/Amrapali OC/Env/2019-20/1611 dated 04.11.2019 and email dated 04.12.2019. Based on the site visit on 11.09.2019 and reply/ action taken reports and other documents submitted by the project proponent, the updated observations and remarks of Regional office, Ranchi are given here under:



S. No.	Partially Complied / Non complied Environmental Clearance conditions as per MoEF&CC, New Delhi's show cause notice letter no. J-11013/112/2018-IA I (M) dated 12.12.2018	Reply submitted by Project Proponent	Updated observations and remarks of Regional office, Ranchi on the basis of site visit dated 11.09.2019 and reply/ action taken reports submitted by the project proponent
i	<p><b>Specific Condition i:</b> 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.</p>	<p>Forest land has been released vide letter no F.NO-08/48/2008/FC Dated 12.10.2010 for diversion of 531.64 ha of forest land for Amrapali OCP. Online proposal for diversion of 432.59 ha of forest land has been done and hard copies submitted to forest department vide ref no:- FP/JH/MIN/17211/2015 dated:- 27-10-16. Copy submitted.</p>	<p><b>Complied.</b> Project Proponent reported that "Online proposal for diversion of 432.59 ha of forest land has been done and hard copies submitted to forest department vide ref no:- FP/JH/MIN/17211/2015 dated:- 27-10-16".</p>
ii	<p><b>Specific Condition ii:</b> 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.</p>	<p>The top soil (2.6 L m3) has been preserved near Honhe OB dump. Tender for the work of storage and conservation of top soil at an estimated cost of Rs 30,19,122 only is under process. The work will be done during monsoon 2019. Copy submitted. Top soil stockyard site has been earmarked as Top soil stockyard in the project.</p>	<p><b>Partially Complied. Efforts made for compliance, work in progress:</b> Project Proponent reported that "The top soil (2.6 L m3) has been preserved near Honhe OB dump. Tender for the work of storage and conservation of top soil at an estimated cost of Rs 30,19,122 is under process." Top soil was placed at the same place (see photo 6). Catch drains were constructed in the periphery of top soil dump in the south side (see photo 5). <b>No catch drain was constructed on the east side of the top soil dump (see photo 6) &amp; it was instructed to project authorities to construct it soon.</b></p>
iii	<p><b>Specific Condition iii:</b> Project authorities must submit the cross-section of all the O/B dumps mentioning height, width, angle of slope and volume in it.</p>	<p>OB Dump has been stacked at earmarked dumpsite with proper terracing of OB and slope is maintained as per statutory provisions. Copy submitted.</p>	<p><b>Being Complied but further action needed.</b> Grassing and vegetation have been developed at some places on the Honhe O/B dump (see photos 1, 2, 3 &amp; 4). But at other places grassing and vegetation has not been developed (see photos 2, 3, 4 &amp; 5). Grassing and Vegetation had been developed at many places of the Birgnat O/B dump (see photo 12 &amp; 19). However at places on this dump grassing &amp;</p>



			<p>vegetation has not been developed (see photo 13). Project authorities assured that they will cover grassing &amp; vegetation on the remaining portion of the dump within short period.</p> <p>As per the data submitted, dump slope of Honhe and Binglat is 21° and 20° respectively. Dump height of the honhe and binglat is 75.12 and 69.51 M respectively. Project Proponent should keep the dump height as per the EIA/EMP. As per the EIA/EMP there should be one external OB dump and rest should be internal dumping. However, in the project there are two external OB dumps i.e. Honhe OB dump and Binglat OB dump. Project authorities informed that due to non availability of land they have made two external dumps.</p>
iv	<p><b>Specific condition iv:</b> 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.</p>	<p>Construction of Catch drains of width 1.5 m &amp; depth 1.00 m along the toe wall is in progress.</p>	<p>Partially complied, efforts made for compliance but work in progress.</p> <p>Catch drain along the Honhe O/B dump in the south side were made (see photo 4) but needs desiltation at many places. North side of Honhe O/B dump was visited. At some places catch drains were observed (see photos 2&amp;3), but were silted. Siltation ponds were not made. It was instructed to desilt the catch drain, extend them to cover all the low lying areas and make siltation ponds so that there is no chance of O/B silt going into nearby nala.</p> <p>Garland drain was constructed along the periphery of mine (see photo 10) on one side (south) to stop water entering into the mine. A temporary coal dump was observed in the east side of mine pit. No catch drains was constructed on the periphery of this coal dump. Project authorities informed that this coal dump was of temporary nature and it would finish within a short time. However it was instructed to make catch drains &amp; siltation ponds along the periphery as long as coal is there.</p> <p>Catch drains were constructed at some places along Binglat O/B dump. Siltation</p>



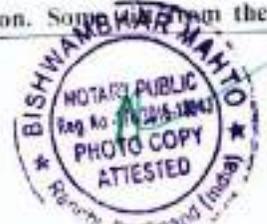
		ponds were also constructed. The nala flowing from side of the dump had check dams constructed so that silt stops in stages (see photo 12). <b>It was instructed to make catch drains along the coal dump especially towards the side facing Dudhmatia nala.</b>
v	<b>Specific condition v:</b> No retaining wall at toe of dumps and O/B benches could be observed in the project.	At Binglat OB dump, construction of 1 km length Toe wall (width 0.375 m and height 1.25 m) is in progress at North-west side, where its alignment is final. On the other Sides OB dump is still moving & not final. The Toe wall at these sites will be created & maintained when the edge of the OB dump will take final shape. <b>Partially complied. Retaining wall was not observed at the toe of the Honhe O/B dump (see photo 1,2&amp;3). Project authorities assured that they will construct retaining wall at all necessary places within a short period. Retaining wall in between Honhe O/B dump and top soil dump needs to be constructed. Catch drain between O/B dump &amp; top soil dump also needs to be constructed / desilted.</b> A retaining wall was constructed along the west side of the Binglat OB dump (see photo 19). <b>But this toe wall needs to be extended to cover all the necessary portions of the Binglat O/B dump.</b>
vi	<b>Specific condition vi:</b> The green belt development has not been found satisfactory.	Around 12,850 plants have been planted for raising of Green Belt / Block plantation. Details of plantation is given below:- (a) 3000 plants (approx.) on Binglat OB dump in 3 Ha, (b) 1000 plants (approx.) near Ambey & Mahalaxmi camp in 0.1096 Ha, (c) 150 plants (approx.) at Govt. School Honhe & St. Joseph School Mander, (d) 1200 plants around NBCC road in 3 Ha area by State Forest Department and (e) 7500 on Binglat OB dump in 3 Ha area by State Forest Department. During Monsoon 2019 additional 1 Ha plantation will be raised by State Forest Department at the rate of 2500 plants per hectare. <b>Partially Complied, efforts made for compliance but work in progress.</b> Green belt development / plantation has been done on the Binglat O/B dump (see photos 14,15,16 & 17). Some plants were grown with the help of Forest Department and some by the project proponent. Plantation was done near the toe wall of the Binglat O/B dump. Some plantation in and around the outsourcing company workshop and office area was also observed. However, <b>avenue plantation on both side of haul road and green belt around bunker and surrounding area for coal stock has not been developed as per EIA/EMP report.</b> Project people showed one facility that has been started for medicinal plants: a section of small nursery.
vii	<b>Specific condition viii:</b> No	Presently the workings of the <b>Assured to complete the nature: "When the</b>



	embankment has been found to protect the area from flood water of river Barki.	mine are above HFL( RL of mine workings presently is 489.96 m and RL of HFL is 455 m) and mine is 0.780 km away from Barki river. When the mine workings will approach Barki river in about 4 years, embankment will be constructed.	mine workings will approach Barki river in about 4 years, embankment will be constructed".
vi ii	<b>Specific condition ix:</b> No document submitted to show that consultation with Regional Director, Central Ground Water Board has been done.	Application made to Central Ground Water Authority for taking NOC vide ref no:-21-4/328/JH/MIN/2018 dated 29.12.2018. Copy submitted.	<b>Being complied but further action needed.</b> Project Proponent has submitted a copy of letter dated 01.01.2019 addressed to CGWB regarding application for permission to dewater ground water submitted vide ref no:-21-4/328/JH/MIN/2018 dated 29.12.2018. <b>Follow up with CGWB should be done to expedite the work/process</b>
ix	<b>Specific Condition x:</b> No piezometers have been found on the project site. Data collected has not been sent to Central Ground Water Authority as per EC condition.	Work awarded for installation of 1 no. of piezometer Borehole drilled & installation of piezometer is in progress. Copy of award letter submitted.	<b>Being complied but further action needed:</b> One Piezometer was installed in the project (see photos 20). Its reading display was also shown by project authorities. <b>Data collected should be sent to CGWA as per EC condition.</b>
x	<b>Specific Condition xi:</b> No letter has been submitted to prove that permission from competent authority has been obtained for drawl of ground water for domestic use.	Application made to Central Ground Water Authority for taking NOC vide ref no:-21-4/328/JH/MIN/2018 dated 29.12.2018 Copy submitted.	<b>Being Complied but further action needed:</b> Project Proponent has submitted a copy of letter dated 01.01.2019 addressed to CGWB regarding application for permission to dewater ground water submitted vide ref no:-21-4/328/JH/MIN/2018 dated 29.12.2018. <b>Follow up with CGWB should be done to expedite the work/process.</b>
xi	<b>Specific condition xii:</b> No documents with respect to consultation with Regional Director, CGWB has been submitted. Rain water harvesting plan has not been submitted.	Application made to Central Ground Water Authority for taking NOC vide ref no:-21-4/328/JH/MIN/2018 dated 29.12.2018 Copy submitted. However, check dams and ponds have been constructed for water recharging. Check dams - i) Construction of 1 no check dam at Dhudhmatia nailah near	<b>Being Complied but further action needed:</b> Project Proponent has submitted a copy of letter dated 01.01.2019 addressed to CGWB regarding application for permission to dewater ground water submitted. <b>Project Proponent has submitted a copy of approval of estimate for the work for providing rain water harvesting structure at P.O Office and executive hostel. Some check dams near Binglat O/B dump was observed.</b> Project authorities informed that Mine



		<p>Binglat OB dump is in progress in 2018-19. Copy submitted.</p> <p>Ponds-1 no. of pond constructed at Honhe &amp; 01 no of pond has been constructed at Birhor tola. Copy submitted.</p> <p>Construction of 1 No of pond at Ursu more is in progress. Copy submitted..</p>	<p>sump (see photo 11) was used for rainwater harvesting. Water from mine sump is utilized for water spraying &amp; fire fighting. A large water reservoir (filled mine point was observed near top soil dump) (see photo 7). Project authorities informed that this water reservoir is also catering to ground water recharge.</p>
<p>xi i</p>	<p><b>Specific condition xiii:</b> Appropriate mitigative measures to prevent pollution of Barki river in consultation of State Pollution Control Board has not been taken up.</p>	<p>Presently there is zero mine water discharge into Barki river. Letter written to Regional office of JSPCB to suggest appropriate mitigative measures to prevent pollution of Barki river in consultation of State Pollution Control Board vide ref no- PO(A)/ENV/2018-19/2030 dated 26/12/2018. Copy submitted.</p>	<p><b>Partially Complied.</b> Project Proponent has submitted a copy of letter no. PO(A)/ENV/2018-19/2030 dated 26/12/2018 communicated Regional officer, JSPCB.</p> <p><b>It was observed that Dudhmattia nala flowing just besides the Bingalat O/B dump from the sides of outsourcing company workshop, etc, had no grassing and vegetation on its side slopes. Since haul road has been constructed besides this nala with the help of O/B material, some top soil spreading and grassing &amp; vegetation needs to be developed on the side slopes facing this nala. Immediate steps should be taken in this matter. Under no circumstances canteen waste of outsourcing company be thrown into the nala.</b></p> <p>Near the truck parking yard there was low lying area and water carrying coal dust would flow of going downs stream and ultimately into the river Barki (see photo 08). It was instructed to project authorities to make some siltation ponds and check dams so that coal dust settles and only clear water flows into the Bakri river.</p>
<p>xi ii</p>	<p><b>Specific condition no xv and general condition no. xi:</b> No STP and ETP have been installed till date. Oil and grease trap has not been provided at the project site.</p>	<p>This mine is a Greenfield project which started coal production from February 2014. Residential colony is proposed to be constructed at Honhe. STP will be constructed when the residential colony comes-up.</p>	<p><b>Partially Complied:</b> Project Proponent reported that "STP will be constructed when the residential colony comes-up". Oil and grease trap have been made in the workshop area of outsourcing company (see photo 24). However the oil &amp; grease trap was not functional. There was no mechanism/ pump for water recirculation. Some from the oil &amp;</p>



		Construction of oil and grease trap in progress. It will be completed by February 2019.	grease trap had breached its tank & crossed over (see photos 23). It must be ensured that no silt and / or water goes into the nearby nala from the oil & grease trap.
x v	<b>Specific condition xvi:</b> Latest CTO has not been submitted.	Consent to operate under sec 25 & 26 of the water (prevention and control of pollution act 1974 and under sec 21 of the air prevention and control of pollution act 1981) has been obtained vide ref no. JSPCB/HO/RNC/CTO 3150752/2018/2125 dated 31.12.2018. Copy submitted.	<b>Complied.</b> Project Proponent has submitted a copy of latest CTO obtained from JSPCB vide ref no. JSPCB/HO/RNC/CTO - 5076029/2019/1230 dated 30.06.2019 which is valid up to 30.06.2020.
x v	<b>Specific condition xvii :</b> Comparison of pre-project and latest health report of the community has not been submitted.	IME and PME health camps held. No occupational disease diagnosed. Copy attached of Health check up report for around 5Km radius of mine from 2013 to 2018 submitted.	<b>Being Complied but further action needed:</b> Project Proponent has submitted health check up reports of last five years. However, <b>comparison of pre-project and latest health report of the community should also be submitted.</b>
x vi	<b>Specific Condition xviii:</b> Monitoring Report of land use pattern using remote sensing technique has not been submitted to Regional office Ranchi.	Digital processing of entire lease area by using remote sensing technique has been completed by CMPDIL. Copy submitted.	<b>Being complied but further action needed.</b> Project Proponent has submitted a copy of land restoration/ reclamation monitoring report for the year 2015. <b>Project Proponent vide their email dated 04-12-2019 submitted a copy of vegetation cover mapping of the entire North and South Karanpura Coal Fields based on satellite data of year 2018. However project wise specific monitoring report of land use pattern for Amrapali coal mining project should be submitted.</b>
x vi i	<b>Specific condition xix:</b> Copies of pollution under control of vehicles in the project have not been submitted to Regional Office Ranchi.	Copies of pollution under control of vehicles deployed in the project area attached. Copies submitted.	<b>Complied.</b> Project Proponent has submitted copies of PLC certificates of few vehicles.
x vi ii	<b>Specific condition xx:</b> Compensation to land owners and land loser has not been provided.	Payment of Land compensation is done as per Compensation Rule in CIL, which is at par with national R&R Policy. Land compensation for 11.45 acres has been paid till date to 30	<b>Being complied but further action needed.</b> Project Proponent has submitted that "Land compensation for 11.45 acres has been paid till date to 30 persons for an amount of Rs 1.0346421 Cr". Compensation to the remaining affected families should be expedited.



		persons for an amount of Rs 1.0346421 Cr. Documentary evidence of 11.45 acres submitted.	
xi x	<b>Specific condition xxi:</b> 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.	Blasting is done by use of nonel technology for reducing noise pollution and vibration. All mitigating measures as per statute are being taken. Copy of blaster diary & vibration test submitted.	<b>Complied.</b> Project Proponent has submitted copy of blaster diary and vibration test report.
x x	<b>Specific condition xxii:</b> Copy of communication with concerned forest official for conservation of endangered fauna has not been submitted to Regional Office, Ranchi.	DFO was requested for preparation of wild life conservation plan through a letter vide ref no-PO(A)/PD/2018-19/2025 dated 25.12.18. Copy of same letter submitted.	<b>Complied:</b> A copy of the letter to DFO (no-PO(A)/PD/2018-19/2025 dated 25.12.18) has been submitted.
x xi	<b>General Condition iii:</b> Copy of report/ observations made by institutes (ISM, CMPDI) for protection of flora and fauna has not been submitted to Regional Office, Ranchi.	An Environment Management Plan has been prepared by CMPDI. This plan consists of a report for protection of flora and fauna. Copy of same (flora fauna conservation plan) submitted.	<b>Complied.</b> Project Proponent has submitted concerned pages of the EIA/ EMP report.
x xi i	<b>General Condition iv:</b> Monitoring data of CO has not been submitted. Data from four locations has not been submitted. NAAQS-2009 has not been followed.	CO monitoring done & 4 Monitoring Station has been established. Regular monitoring is done by CMPDI. Report attached.	<b>Partially Complied:</b> Monitoring data of CO has been submitted. Monitoring has been done at 2 location. <b>The level of CO ranges from 1-13 PPM. However, submitted monitoring data is not from NABL accredited/ MOEF&amp;CC recognised laboratory.</b> Project Proponent has also submitted ambient air quality monitoring data at 4 locations. As per the quarterly reports of March 2019 and December 2018 the level of Total* particulate matter (*PM10+>PM10) ranges from 166 to 569 µg/m <sup>3</sup> , particulate matter (PM10) ranges from 98 to 293 µg/m <sup>3</sup> , particulate matter (PM2.5) ranges from 30 to 86 µg/m <sup>3</sup> . SO <sub>2</sub> and NO <sub>2</sub> were found within the stipulated limit. <b>There was spontaneous combustion at some places in the coal dump in the project. (see photos attached)</b> Water



			spraying was done by the project people on the fire points (see photos 21). It was instructed to increase the water points / nozzles to stop / minimize the spontaneous combustion urgently. Project authorities told that due to less Dispatch / evacuation due to other reasons coal stock had increased and so spontaneous combustion & fire in coal also occurred. They were making efforts for fast dispatch of coal. Arrangement should be made to ensure that there should not be any spontaneous combustion & fire in coal dumps or any O/B dumps.
X xi ii	<b>General condition vi:</b> Fugitive dust emissions have not been controlled properly. Details of water sprinklers i.e. running of water tankers and trips done/ kilometres covered has not been submitted to the Regional Office.	Two nos of water sprinklers of 28 Kl capacity have been deployed round the clock to sprinkle water for dust suppression. In addition to above, there are ten water sprinklers Two nos of water tanker of 12kl capacity have been deployed and the contractor has deployed 8 nos of water tanker (12kl / 20kl ) which are used to suppress dust in transporting road & loading / unloading points with 9 trips/tanker/ day.	<b>Partially complied, efforts made for compliance.</b> Some fixed water sprinklers were installed near the truck parking yard & haul road (see photos 9). The fixed water sprinkling system should be kept functional on a regular basis. <b>Some fixed water sprinkling system should be installed in the haul road from mines pit outlet side to Honhe O/B dump.</b> Some mobile water tankers were observed sprinkling water on the roads in the project (see photo 18). <b>Working hour details of only two water tankers have been submitted. Average running hour of the water tanker was 4 hr/ day per water tanker from April 2019-September 2019, which is less than satisfactory.</b>
X xi v	<b>General condition xi:</b> Details of Protective Respiratory devices distribution amongst employees and occupational health surveillance programme have not been submitted.	1. Persons working in dusty area are supplied with dust respirator. Copy submitted for number of Protective Respiratory devices distributed amongst employees. 2. IME before employment and PME for 1/4 <sup>th</sup> work-force is regularly done for keeping OHS surveillance. No Occupational disease diagnosed.	<b>Being Complied:</b> Project Proponent has submitted details of PPE provided to workers in the year 2017, 2018 and 2019. Project Proponent also reported that "IME before employment and PME for 1/4 <sup>th</sup> work-force is regularly done for keeping OHS surveillance. IME and PME health camps held". Details submitted regarding health camps in terms of year, NO. Of camps and No. Of Beneficiaries.
X xi v	<b>General condition xiii:</b> Expenditure on Environmental protection has not been submitted. PP	Year wise expenditure details on Environmental Protection measures are submitted.	<b>Complied.</b> Project Proponent has submitted details of Year wise expenditure on Environment Protection. The expenditure has been



	should submit year wise expenditure details on Environmental Protection measures.		<p>incurred on Plantation, Diesel consumption by water tanker, Top soil management, Toe wall, pond, Check dam, Peizometer.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Total expenditure (In Cr)</th> </tr> </thead> <tbody> <tr> <td>2018-19</td> <td>207.3213</td> </tr> <tr> <td>2017-18</td> <td>275.6478</td> </tr> <tr> <td>2016-17</td> <td>139.3695</td> </tr> <tr> <td>2015-16</td> <td>190.07877</td> </tr> </tbody> </table> <p>Some fixed water sprinkling system should be installed in the haul road from mines pit out let side to Honhe O/B dump.</p>	Year	Total expenditure (In Cr)	2018-19	207.3213	2017-18	275.6478	2016-17	139.3695	2015-16	190.07877
Year	Total expenditure (In Cr)												
2018-19	207.3213												
2017-18	275.6478												
2016-17	139.3695												
2015-16	190.07877												
x x vi	<b>General Condition xv:</b> A copy of receipt of EC has not been submitted from concerned Panchayat/ Zila Parishad, Municipal Corporation, etc.	Clearance letter has been provided to the local authority and hoisted in company's web-site. Copy submitted.	<b>Complied.</b> Project Proponent has submitted a copy of receipt of EC provided to Mukhiya, Gram Panchayat- Koed. <b>However no date has been mentioned in the report.</b>										
x x vi i	<b>General condition xvii:</b> Name of newspaper and date of newspaper advertisement informing that the project has been accorded has not been submitted	Environment clearance letter has been uploaded on CCL Web Site-central coalfields in/our initiative/Env& Forest / Env. Clearance / Magadh-Amrapali / Amrapali OCP and submitted to MOEF .Copy submitted.	<b>Complied but date clause not followed.</b> Project Proponent has submitted copy of newspaper advertisement published in The Telegraph and Hindustan on 07 August 2018. <b>The clause of 7 days has not been followed for publication of newspaper advertisement.</b>										

This issues with the approval of DDGF (Central).

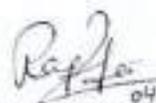
Encl: Annexure 1 including 24 photos

Yours faithfully,

(Rajeev Ranjan)  
Scientist 'D'

Copy to:

1. Scientist 'E', (Kind attention: Shri R.B.Lal), 1A (Coal Mining), Vayu Wing, 3<sup>rd</sup> floor, Ministry of Environment, Forest and Climate Change, Indra Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003
- ✓ 2. Project Officer, Amrapali OCP, M/s CCL, Zila Parishad Building, Tandwa, Chatra, Jharkhand - 825321 ( Reply/action taken report to the above point must be submitted to RO Ranchi within 15 days of receipt of this letter)
3. Deputy General Manager & HOD (Environment), M/s Central Coalfields Ltd., Darbhanga House, Ranchi, Jharkhand- 834001.

  
04.12.19  
(Rajeev Ranjan)  
Scientist 'D'



Annexure-I



Photo 01: Photo of grassing and vegetation on slope of Honhe OB dump.



Photo 02: Photo of silted catch drains around the Honhe OB dump.



Photo 03: Photo of silted catch drains around the Honhe OB dump. Some grassing and vegetation on the dump can also be seen



Photo 04: Photo of catch drains around south side of Honhe OB dump



Photo 05: Photo of catch drain in south side of top soil dump. Drains are almost fill with silt



Photo 06: Photo of top soil dump and water filled in the mine pit.

Annexure-I

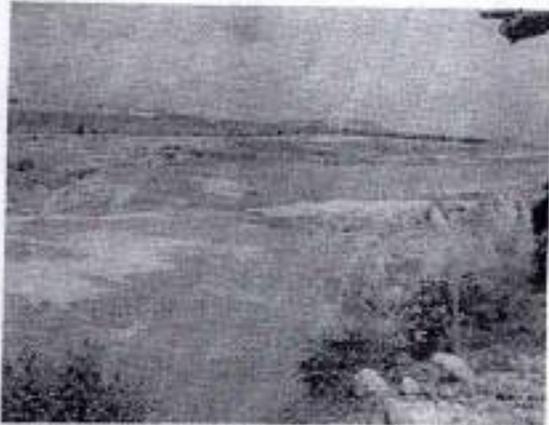


Photo 07: Photo of water filled in one of the mine pit in the project.



Photo 08: Photo of low lying area downwards from the truck yard. Water going towards river Barki.



Photo 09: Photo of some fixed water sprinklers at the truck parking yard.



Photo 10: Photo of garland drain around the south side of the mine pit.



Photo 11: Photo of sump, backfilling and some spontaneous heating in the background.



Photo 12: Photo of some check dams over the nala in the periphery of Bingalat OB dump.

Annexure-1



Photo 13: Photo of portions of Bingalat OB dump where no grassing and vegetation have been developed.



Photo 14: Photo of some green belt developed on top of the Bingalat OB dump.

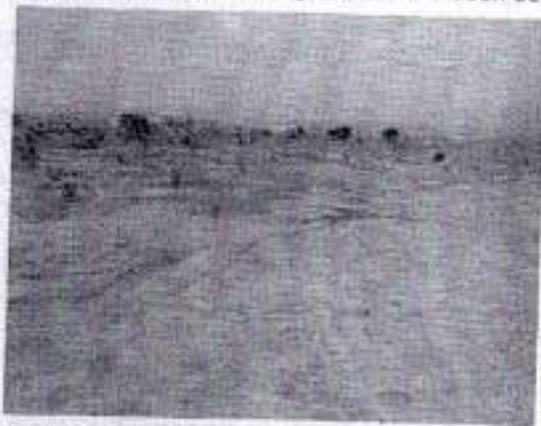


Photo 15& 16: Photo of plantation on top of the Bingalat OB dump.

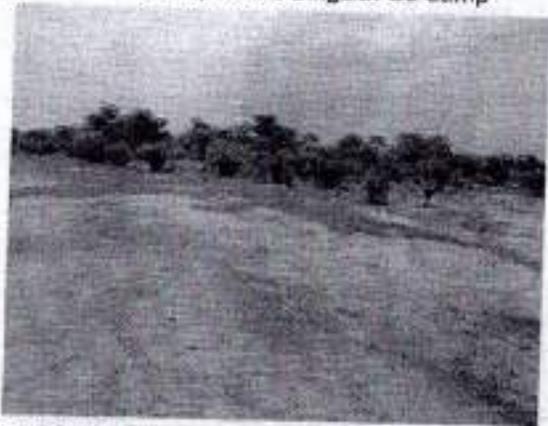


Photo 17: Photo of new plantation on the Bingalat OB dump.

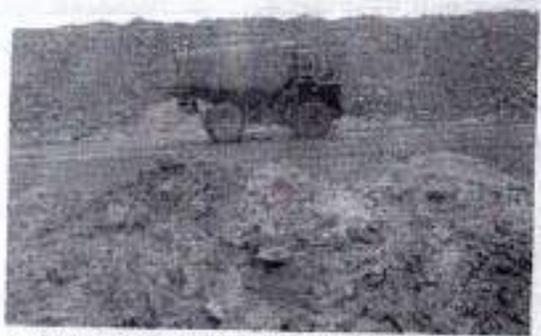


Photo 18: Photo of Water tanker sprinkling water on mine roads.

BISHWAMBHAR MAHTO  
NOTARY PUBLIC  
Reg. No. - 176/2014-1864  
PHOTO COPY  
ATTESTED  
Ranch, Barkhanda (Jharkhand)

Annexure-I



Photo 19: Photo of retaining wall in the west side Of the Bingalat OB dump. Catch drain has also been started but it was incomplete.



Photo20:Photo of Piezometer in the mine project



Photo 21: Photo of fire fighting with the help of water sprinkling over the coal dump where spontaneous combustion was occurring.



Photo 22: Photo of some plantation near the Piezometer area in the project.



Photo23:Photo of silt coming out from oil & grease trap.



Photo24: Photo of non functional oil & grease trap

BISHWAMBHAR MAHTO  
NOTARY PUBLIC  
Reg. No. 114/2016-1944  
PHOTO COPY  
ATTESTED  
Raenchi Jharkhand (India)



ANNEXURE-VI-A



सी०सी०एल०  
A Miniratna Cat-1 Company

सेन्ट्रल कोलफील्ड्स लिमिटेड  
(भारत सरकार का एक उपक्रम)  
दरभंगा हाउस, रांची ८३४ ०२९  
Central Coalfields Limited  
(A Subsidiary of Coal India Limited)  
Darbhanga House, Ranchi.

Phone : (0651)-2360129, 2360606 (PBX)  
Ext. 5511  
फैक्स / Fax : 2360129 वेब-साइट / Website :  
http://ccl.gov.in

No.GM(C)/IC/Amrapali/2017/147  
Dated 22 May 2017.

To,  
The Group General Manager (Projects),  
M/s RITES Ltd.  
Regional Project Office,  
Metro Rail Service Building (2<sup>nd</sup> Floor),  
56, CR Avenue, Kolkata -700012

**WORK ORDER**

**Name of Work: "Detailed Engineering & Construction Management for the work of Rail-Infrastructure for Proposed Amrapali OCP Siding of CCL" at an estimated cost of Rs 41347.94 lakhs.**

- Ref: 1. RITES/RPO-KOL/Market/Vol-48/2017-18/519 dated 14.02.2017  
 2. RITES/RPO-KOL/CCL/North Urimari & Amrapali/2017-18/996 dtd 24.03.2017.  
 3. RITES/Ranchi/CCL/Amrapali /2017/20/475 dtd 25.03.2017  
 4. RITES/ RPO-Kol/CCL/Projects/1276 dtd 20<sup>th</sup> April 2017  
 5. RITES Letter no. RITES/RPO-KOL/CCL/Offer/1580 dtd 17.05.2017.  
 6. RITES Letter no. RITES/RPO-KOL/CCL/Offer/1602 dtd 19.05.2017.

Dear Sir,

With reference to above, CCL is pleased to award the subject work in your favour as per your offer as a Project Management consultant for undertaking the subject work of "Detailed Engineering & Construction Management for the work of Rail Infrastructure for Proposed Amrapali OCP Siding of CCL" at an estimated cost of Rs 41347.94 lakhs (Rs. Four Hundred Thirteen Crores Forty seven Lakhs and Ninety Four Thousands) only.

Sl. No.	Description	Amount
1	Cost of the project i.e. Revised DPR cost of M/s RITES Ltd	Rs 37489.53 lakh
2	Contingency @ 1% of project cost	Rs. 374.89 lakh
<b>Total</b>		<b>Rs 37864.42 lakh</b>
4	RITES fee @ 8% on Rs 37864.42 lakh	Rs 3029.15 lakh
5	Service tax @ 15% (including Swachh Bharat Cess & Krishi Kalyan Cess) on RITES fee	Rs 454.37 lakh
<b>Total</b>		<b>Rs 41347.94 lakh</b>

- Note:** 1. As per CIL-RITES MoU, the Service tax as legally leviable shall be payable extra.  
 2. RITES has mentioned in their offer that the actual cost may vary after Detailed Engineering.

The above total project cost of Rs 41347.94 lakhs is inclusive of contingency fee @1% and RITES fee @8% and Service tax @15% of RITES fee (including Swacchh Bharat cess & Krishi Kalyan Cess).

Further, as mentioned in clause no. 9.1 of RITES offer and as agreed by RITES vide letter at sl. No 5 above, RITES should incorporate Penalty clause in the contractor's agreement and the recovered penalty amount shall be passed on to CCL.

General Manager (Civil) (HO)  
Central Coalfields Limited  
Darbhanga House Ranchi

General Manager (P)  
RPO



**Engineer-in-Charge:** General Manager of the Company, Magadh & Amrapali Area will nominate Engineer-in-charge to supervise the execution of the work by M/s RITES Ltd. The Engineer-in-charge shall act on behalf of the company for all matters pertaining to the works under this agreement and shall be authorized to supervise the work to inspect, examine and approve any part of the work, the workmanship employed and the materials to be used for the same at any stage for the execution of the work as per Railway standard.

The detail scope of work, remuneration for project management consultancy, Terms & Conditions for execution of the work are furnished below :-

**2.0 : Scope of work :-**

Scope of work of the contract is for rendering technical consultancy services and Project Management in connection with construction of Amrapali Siding & ancillary works under CCL. The Construction Management includes Detailed engineering, tendering services, pre-construction services, construction, planning including procurement of materials, construction consultancy, project monitoring and quality control and commissioning of work.

**3.0 : Detailed Engineering- The services shall cover :-**

- i. Detailed Engineering as per the revised detailed project report and final location survey.
- ii. Preparation of detailed schedule of quantities and cost estimate for all Civil Engineering, S&T, Weighbridge and Electrical works (OHE) for inviting tenders by RITES.
- iii. Preparation of all construction drawings including Bridges in respect of works related to Civil Engineering, S&T & Electrical works (OHE) and obtaining approval from Railways, wherever necessary.
- iv. Soil investigation at locations where important structures like high bank bridges, deep cutting/ filling are to be conducted as necessary by RITES.

**4.0 Construction management :-**

- i. Procurement of rails and PSC sleepers with fittings, points & crossings, track fittings etc including transportation.
- ii. Construction of Railway Formation & bridges as per IR specifications.
- iii. Procurement of stone ballast as per IR specifications.
- iv. Laying of new Permanent way with Points & crossings including packing for consolidation of ballast.
- v. Procurement and installation of Electrical (OHE) equipments.
- vi. Procurement and installation of S&T equipments.

**4.1 Tendering services:-**

Preparation of tender documents comprising the following:

- i. Subdividing various civil Engineering works, S&T and OHE works into individual contract packages as per site suitability.

Preparation of tender documents comprising of:

- a) Detailed Scope of work
- b) Technical specification for earth work, Bridge work & concreting works for Civil engineering, Track linking work, S&T and OHE work conforming to Indian Railway (IR) standards practices.
- c) Tender drawings
- d) Schedule of quantities(SOQ)
- e) Special condition of contract
- f) Notice Inviting Tender (NIT)
- g) Other relevant documents for technical & commercial bid.
- h) Tender document will also have the provision of price variation clause
- i) Integrity pact.

*[Signature]*  
General Manager (Civil)/ICED  
Central Coalfields Limited  
Dardhanaga House Ranchi

*[Signature]*  
General Manager(P)  
RPO / Kol



- 4.2 The tendering services shall be provided by RITES as per responsibility fixed in the MoU in between RITES-CIL dated 30.07.2015 (Annexure-A, stage-III - Detailed engineering & Project Management Consultancy).

637

Sl. No	Job Responsibility	By Whom	Remarks
1	Completion of Detailed design and drawing for all civil works, rail tracks structures etc. and obtaining approval as applicable.	RITES	
2	Submission of detailed specification, BOQ and cost estimate for all works	RITES	Cost estimate to be prepared based on current DSR/ prevalent SOR of RITES / railway rates/ market rate analysis in case of non-scheduled items with suitable remark about justification of rate.
3	Preparation of detailed tender document including NIT	RITES	
4	Approval of Sl.No. 1,2 & 3	RITES	Under intimation to CCL
5	Notification of NIT in News papers.	RITES	
6	Receipt of Tenders	RITES	
7	Evaluation including preparation of briefing notes.	RITES	
8	TC recommendation by RITES witnessing or observing by CCL's representative	RITES	
9	Acceptance/ Approval of tender evaluation statement & recommendation	RITES	
10	Preparation of draft LOI on contractor	RITES	
11	Placement of LOI on contractor	RITES	
12	Preparation of draft Agreement	RITES	
13	Signing of Agreement with Contractor	RITES	On behalf of CCL against CCL's power of attorney.
14	Project supervision and quality control monitoring of contract Certification of bill by RITES	RITES	
15	Acceptance of Bill & Payment to contractors.	RITES	RITES will pay the bill to contractor after duly checked and certified and a copy of the same to be submitted to CCL.
16	On completion of work and closing of contracts	RITES	RITES will initiate proposal for closure of contract with all relevant documents and submit the proposal to CCL.

- 4.3 **Monitoring of construction works (Civil Engineering, S&T work and OHE work):** The details of services to be provided under this clause is explained by RITES at page 4 & 5 of their offer (clause no.4.3.1 & 4.3.2 of RITES offer).

- 4.4 **Construction consultancy** - The construction consultancy services shall be provided by RITES as per responsibility mentioned in the MoU in between RITES-CIL dated 30.07.2015 (Annexure-A, Stage-III - Detailed engineering & Project Management Consultancy). This is as per Sl. No 14, 15 & 16 the above table mentioned under clause 4.2.

- 5.0 **Progress Review** - This will be as per MoU between CIL - RITES dated 30.07.2015, Annexure-A, Page-3 (under heading "Progress Review").

General Manager (Civil) (H.O.)  
Central Coalfields  
Darrhanga, Howrah - 726 002

General Manager(P)  
RPO / Kol



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**6.0 Facilities to be provided by CCL: -**

This has been elaborated by RITES in clause no. 6.0 of its offer at page no.6 & 7. Important points under this clause of RITES includes: -

- a. CCL shall provide suitable "Site office accommodation" with water supply to RITES personnel at site free of cost. RITES will only pay for the electricity charges and water charges, if any. If ready built office accommodation/store/go down is not made available to RITES, the same will be constructed by RITES on CCL's land and actual cost of which shall be charged as basic cost.
- b. The guarding of rails, sleepers and other fittings (P.Way materials) through watch & ward shall be arranged by RITES for which cost shall be reimbursed by CCL on submission of documentary proof of payment.
- c. As a Principal Employer CCL shall issue necessary certificates in Form-V, Way Bill, "C" form etc. to the executing agencies/Suppliers etc. engaged by RITES for & on behalf of CCL to tax benefit.
- d. CCL shall take necessary action for acquisition of private land and provide encumbrances free land for construction purpose to the executing agency.
- e. All administrative matters relating to land acquisition procedures shall be the responsibility of the employer. Any law & order problem in connection with the land related issues shall be referred to the employer for early decision.
- f. Permission, if any required from any statutory authority for cutting/felling of Trees coming in the way of Rail corridor, shall be obtained by CCL. RITES will assist CCL in obtaining such permission.
- g. Clearance from Forest Department/Pollution control Board etc, if required shall be obtained by CCL. RITES will assist CCL.
- h. The statutory charges payable to Railways@2% of estimated cost for approval of Plan and further 2% of actual cost of completed work, before commissioning to get the track fitness certificate.
- i. Hiring charges of tower wagon, locomotive for trial run, charges for power block etc to be paid to Railway authorities and other statutory bodies of state govt. & central govt., if any for obtaining approval shall be paid by CCL separately. CCL should also pay, if any, additional fees as may be imposed by the Railways during the course of execution of the project.

*[Signature]*  
General Manager (C/CO)  
Central Coalfields Limited  
Darbhanga House Ranchi

**7.0 Responsibilities of M/s RITES: -**

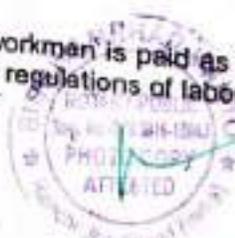
This has been mentioned by RITES in clause no. 7.0 of its offer at page no. 7 & 8. Important points under this clause includes:

- (a) M/s RITES shall be responsible for measurement of all item of works concerned under their scope of work, shall coordinate with all agencies involved in the execution of the same and shall be responsible for achieving the scheduled completion as per target date. Extension of completion time to agencies if required, due to unavoidable reasons, shall be granted with recorded reasons by RITES.
- (b) M/s RITES shall be responsible for monitoring the progress of work as per requirement of CCL, monthly progress report and other progress reports as per proforma approved by the CCL shall be submitted by M/s RITES regularly to Engineer In Charge and GM(C)/CCL.
- (c) RITES will ensure that the safety rules & regulations are implemented during execution for the safety of men & materials.
- (d) M/s RITES Ltd. will ensure that the wages of workmen is paid as per minimum wages act and also see that the other rules and regulations of labour law related to this work is being followed.

*[Signature]*  
General Manager (P)  
RPO / (Kd)

a

g



(e) RITES will be responsible for audit observation, CTE observation, contractors claim and arbitration, if any.

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629

## 8.0 Time Schedule: -

As mentioned by RITES in their letter dtd 24.03.2017, the time of completion will now be 24 (Twenty Four) months from the date of work award.

Hindrance register shall be maintained at site to record the various hindrances encountered during the course of execution. Hindrance register will be signed by both the parties. Causes of hindrances will be intimated to CCL.

## 9.0 Remuneration & Payment terms-

9.1 For undertaking project management services of work, RITES Ltd. shall be paid by CCL, the consultancy and supervision fee @ 8.0% on the executed value or awarded value. The value of the work will include cost of labour, cost of materials, cost of escalation, soil investigation, security guard for materials etc.

The terms of payments of fees to RITES and stages of disbursement / procedures for undertaking projects entrusted by CCL to RITES have been mentioned in the renewed MoU between CCL & RITES on dated 30.07.2015. The terms of payment of fees are as under : -

Sl. No.	Deliverables	PMC fee 8.0% of awarded value or final executed value whichever is lower.
1	Detailed Engineering and Tender Documents consisting of detailing and design of bridges, curves, followed by Geo-technical investigation.	10% of PMC fee adjustable on awarded value or final executed value, whichever is lower.
2	Calling of tenders, evaluation and award of contract.	10% of PMC fee adjustable on awarded value or final executed value, whichever is lower.
3	Project supervision including certification of bill and quality control, monitoring of contract.	70% of PMC fee on pro-rata basis as per works certified. Awarded value or final executed value whichever is lower.
4	On completion of work and closing of contract.	10% of PMC fee adjustable on awarded value or final executed value, whichever is lower.
Note	<ul style="list-style-type: none"><li>&gt; In case of increase in scope of work / additional work involving design &amp; supervision this shall be paid for on prorata basis @ of percentage enumerated in the MoU.</li><li>&gt; However, for increase in executed value of work due to quantity variations only, where engineering and design are not involved, no additional fee shall be paid.</li><li>&gt; RITES should incorporate the penalty clause in the contractor's agreement and the recovered penalty amount shall be passed on to CCL.</li></ul>	

## 9.2. Payment Schedule: -

- > The rates of items of the estimates are tentative. The actual rates of items will be taken into consideration for the purpose of payment and will be intimated by RITES Ltd. on acceptance of rates received through tenders.
- > RITES' fee bill will also be adjusted from the available fund of imprest.
- > RITES will make payment for the expenditure towards carrying out the work of Project by the contractors/Sub-contractors/agencies/vendors etc. engaged by RITES on behalf of CCL.
- > Contingency up to 1% of basic cost - miscellaneous expenditure and unforeseen cost of work not covered under BOQ. The nature of contingent expenditure on this account will be clearly spelt in the bills.
- > On completion of the work and on handing over the siding to CCL, RITES shall prepare the final bill of the agency engaged for the work & submit the same to CCL to settle the project account.

General Manager (Civil)/HOD  
Central Coalfields Limited  
Darbhanga House Ranchi

General Manager(P)  
RPO / Kol



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**10.0. Cost of the Project: -**

- i. All actual construction costs including materials, freight & handling charges and all payment made to construction agencies/supplier for construction works. The actual cost of material and materials shall include the element of wastages of materials in handling, central & state Govt. Taxes, duties, local statutory levies, all cost of inspection charges leviable / payable to inspection authorities at the suppliers premises prior to delivery at the prevailing rates for any civil, S&T and OHE, General electrical etc.
- ii. Cost of all materials for construction work (including rails, sleepers, and Points & Crossings, P.Way fittings & Ballast) procured for the work including the charges of Transportation, loading, Unloading taxes, etc.
- iii. All payments against work done made to various agencies engaged by RITES for execution of the work inclusive of all materials, price escalation, claims & taxes etc.
- iv. The basic cost of the work however may change due to increase /decrease in price of materials prevailing at the time of execution of the work and the labour and/or due to increase/decrease in quantities of schedule of items and/or due to execution of non-schedule items, if necessary.
- v. Cost of escalation

**11.0 Compensation for Delay: -**

As per MoU between CIL & RITES, dated 30.07.2015, Annex-A, Stage-III, page-3,

9

"There will be a Liquidated Damage clause in case of delay on the part of RITES. CCL are liable to recover from the fees, due to RITES, a sum equal to 0.5% of PMC fee for the part of work so delayed per week of delay or part thereof. The total liability of the PMC under this clause shall be subjected to maximum of 10% of the fee for portion of work so delayed."

**12.0 Fund Regulation: -**

As per MoU between CIL & RITES, dated 30.07.2015, Annex-A, Stage-III, page-3.

CCL will release, as imprest (in a specified bank account of any scheduled bank) 20% (Twenty percent) of the approved estimated cost to RITES against submission of Indemnity Bond of appropriate amount, to discharge the expenditure towards carrying out the works of project by the contractors/sub-contractors/agencies/vendors engaged by RITES on behalf of CCL for the projects.

Interest accruing to such funds shall be credited to CCL. The format of Indemnity bond which will be submitted by RITES for the above purpose will be as per the format provided by CIL/CCL.

The expenditure incurred thereafter towards carrying out the works of the project shall be adjusted from the imprest. When 80% of the imprest is utilized, RITES shall submit the utilization certificate. Further imprest as per utilization certificate will be paid/ released to RITES to make the total imprest 20% of the estimated cost. This procedure of release of fund shall be repeated, whenever 80% of the total imprest paid to RITES is utilized and utilization certificate submitted by RITES. The utilization certificates should be supported by authenticated documents including statement of priced quantities executed and payments made to the various Suppliers/ parties including contractors/sub-contractors/ agencies/ vendors engaged by RITES for the project.

The release of Payment should commensurate with the actual physical progress as per the Bill of Quantity mutually accepted. A payment Schedule may be prepared for this purpose.

RITES shall submit quarterly expenditure report showing the details of expenditure as per payments made to the contractors/Sub-contractors/ agencies/ vendors from imprest received from CCL.

On the completion of project, RITES shall submit final expenditure statement showing the details of final payment made to the contractors/sub-contractors/ agencies/ vendors engaged by RITES for the project and supported by authenticated documents i.e. copy of final bill etc.

*[Signature]*  
General Manager (Civil) HO  
Central Coalfields Limited  
Darbhanga House Ranchi

*[Signature]*  
General Manager (P)  
RPO / Kd

*[Signature]*

*[Signature]*



13.0 Defect Liability:-

As per MoU between CIL & RITES, Dtd 30.07.2015, Annex-A, Stage-III, page-3.

RITES shall be responsible for rectification of defects, if any, during defects liability period of 12 (Twelve) months after completions of works.

87  
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14.0 Tax & Duties :-

As per MoU between CIL & RITES, Dtd 30.07.2015, Annex-A, Stage-III, page-3.

RITES will ensure that all taxes & levies (including Service Tax, surcharge and Cess thereon as applicable) and surcharge on taxes, duties & levies, insurance charges, license fees etc., including statutory variations during the currency of the contract applicable on transactions between RITES and contractors appointed by RITES, if any, shall be payable directly by RITES or Contractors appointed by RITES and CCL will not have any liability whatsoever on this account. However, RITES will use the TANTIN/PAN etc. of CCL wherever necessary to deposit statutory liability and forward the paid challan to CCL for accountal.

15.0 Confidentiality:

As per MoU between CIL & RITES, Dtd 30.07.2015, page-3, para 10.

Each party agrees to treat as confidential and trade secret all documents and other information and negotiations concerning technical economic and making information of the other party in connection with this MOU and shall not disclose of make public any such information unless prior consent & approval of the other party in obtained in order to disclose the same. However, these restrictions shall not be applicable in respect of any publicity available information.

16.0 Force Majeure:

War, invasion, revolution, riots, sabotage, lockouts, strikes, work shut-downs imposed by Government Acts or Legislature or other authorities, acts of God, epidemics, fires, earthquakes, floods, explosions, accidents, sea navigation blockages or any other acts or events whatsoever which are beyond the control of RITES and which shall directly or indirectly prevent completion of the consultancy services within the time specified in the agreement will be considered FORCE MAJEURE.

As soon as the cause of Force Majeure has been removed, RITES shall notify CCL of such delay incurred in affected activity. From the date of occurrence of a case of Force Majeure, obligation of RITES shall be suspended during the continuance of any inability so caused until the cause itself and the inability resulting there from have been removed and the agreed time of completion of the respective obligation under this agreement shall stand extended by a period equal to the period of delay, occasioned by such events.

17.0 Settlement of Dispute:

This is as per the clause in CIL-RITES MoU Dtd 30.07.2015.

Any Dispute or difference including those considered as such by only one of the parties arising out of or in connection with the contract shall be to the extent possible settled amicably between the parties.

If amicable settlement cannot be reached then all the disputed issues shall be settled by arbitration as provided in Clause 12.

18.0 Arbitration between CCL & RITES:

This is as per the clause in CIL - RITES MoU dated 30.07.2015.

18.1 In the event of any disputes or differences arising between RITES Ltd. and the Owner (CCL) in connection with Contract the provision of DPE office memorandum No. 4(1)/2011-DPE(PMA)-GL, dated 12.06.2013 of its amendments of settlement of Commercial disputes shall be applicable.

General Manager (Civil) (P) / Central Coalfields Limited / Darbhanga House Ranchi

General Manager (P)



41

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Notwithstanding the existence of any dispute or difference and / or reference for the arbitration, the RITES shall proceed with and continue without hindrance with the performance of the work under the contract with due diligence and expedition in a professional manner and the payment due to RITES shall not be withheld by CCL on account of such difference or arbitration proceedings unless such payments is subject matter of the arbitration.

19.0 **Completion Certificate** : M/s RITES will submit a completion certificate after final technical inspection on completion of the work. Within 30 (Thirty) days of receipt of above, the Engineer In Charge shall inspect the work. Defects, if any, noticed by the Engineer In charge shall be rectified by the engaged agency within 30 days under the supervision of RITES.

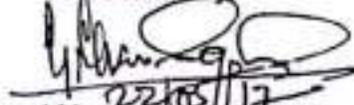
Other terms and conditions will be as per RITES accepted offer, in line with the renewed CIL-RITES MoU dated 30.07.2015.

A formal agreement shall be entered into between two parties for this work. For execution of contract agreement, please submit non-judicial stamp paper of Rs 100.00 and other relevant documents for this work.

It is therefore requested for further needful action at RITES end in liaisoning with General Manager, Magadh & Amrapali Area.

Please return the enclosed duplicate copy for this work order duly signed by you on each page as a token of your acceptance.

Yours faithfully,

  
22/08/17  
General Manager (Civil)/HOD

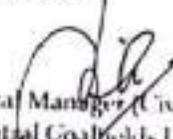
Copy for Kind information to:

1. Director (Finance),CCL, Ranchi.
2. Director (Tech)(P&P),Ranchi.
3. CVO,CCL,Ranchi.
4. GM/TS to CMD, CCL,Ranchi.
5. GM,P&P,CCL, Ranchi.
6. GM(F)(P&P),CCL, Ranchi...in ref. to the Budget Certification no. BGT/PP/CB/17-18/DHC/2(309) did 18.05.2017 for Rs 1.0 Crores.

Copy to:

1. General Manager, M&A Area.
2. AFM, M&A Area.
3. Staff Officer (Civil),M&A Area.
4. Project officer, Amrapali OCP.

  
General Manager(P)  
RPO / Kol

  
General Manager (Civil)/HOD  
Central Coalfields Limited  
Darbhanga House Ranchi







सेंट्रल कोलफील्ड्स लिमिटेड

CENTRAL COALFIELDS LIMITED

(A Subsidiary of Coal India Limited)

A Mini Ratna Cat-I Company

Office of the General Manager (E&amp;M)

DARBHANGA HOUSE, RANCHI-834001,

JHARKHAND.

Phone:0651-2360788, FAX :0651-2360389.

Website: [www.centralcoalfields.in](http://www.centralcoalfields.in),E-mail: [gmenm.ccl@coalindia.in](mailto:gmenm.ccl@coalindia.in) / [enmhod@gmail.com](mailto:enmhod@gmail.com)

Ref. No. GM(E&amp;M)/CHP/20/2826-37

Dated: 31.12.2020

To  
M/s Larsen and Toubro Limited,  
L&T House, N.M. Marg, Ballard Estate,  
Mumbai-400001104

Contact No: +91-9051395556

E-Mail: [rsini@lntec.com](mailto:rsini@lntec.com)

Subject: Letter of Acceptance (LOA)/Work Order (WO) for the Work "Planning, Design, Engineering, Construction, Fabrication, Erection, Supply, Installation, Testing, Trial Run and Commissioning of Coal Handling Plant (12.0 Mtpa) for AMRAPALI OCP consisting of all Civil, Structural, Electrical and Mechanical Works and all other accessories and facilities required to make it complete in all respects on turnkey basis and Operation & Maintenance of plant for five years"

Ref: 1. NIT No: GM(E&amp;M)/Tender/Amrapali/20-944 Date: 06.05.2020

2. Tender ID: 2020\_CCL\_171271\_1

3. Your submitted bid with Bid ID: 536983 along with confirmatory documents on [www.coalindiatenders.nic.in](http://www.coalindiatenders.nic.in)4. All the Corrigendum and clarification in the tender ID 2020\_CCL\_171271\_1, issued on [www.coalindiatenders.nic.in](http://www.coalindiatenders.nic.in)

Dear Sir,

With reference to above, this is to communicate the approval of the Competent Authority for award of the subject work to M/s Larsen and Toubro Limited for an amount of ₹ 2,99,81,44,000.00 (Rupees Two Hundred Ninety-Nine Crores Eighty-One Lakh Forty-Four Thousand) only, including GST.

[ Price excluding GST (Cost to the Company) ₹ 254,08,00,000.00 + GST: ₹ 45,73,44,000.00 = ₹ 2,99,81,44,000.00 (Contract Price)].

The work is awarded to you, subject to the following terms and conditions:

#### 1. Contract Performance Guarantee/Security Deposit

You have to deposit a sum of ₹ 14,99,07,200.00 (Rupees Fourteen Crores ninety-nine lakhs seven thousand two hundred) only as 5% of the Contract Price, within 21 days of issuance of LOA, as per Clause NO. 3 Contract Performance Guarantee/Security Deposit of General Terms & Condition of the NIT.

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644

Work Shall commence only after submission of Performance Security. In case the successful bidder fails to submit the Performance Security within the stipulated time, then the award of work shall be cancelled with forfeiture of the bid security/earnest money. In addition to the above penal measures, the bidder shall not be allowed to participate in the re-tendering process. The company shall also ban such defaulting contractor as per the Guidelines of Banning of Business of CIL.

All running on Account bills shall be paid at **95% (Ninety five Percent)** of the executed work value. This **5% (five Percent)** deduction towards Retention Money will be the second part of Security Deposit.

**2. Payment schedule:**

As per Cl. No. 41 titled as 'Payment' and sub-clause no.41.4 titled as 'Payment Schedule' you will prepare and submit to the engineer for approval, a break-up of the contract price. This contract price break-up shall be interlinked with the agreed detailed PERT network of the contractor setting forth his starting and completion dates for the various key phases of works prepared as per condition of this section. While preparing the PERT network, the supply of P&M Equipment shall be linked to construction of respective Civil and Structural Works. Any payment under the contract shall be made only after the contractor's price break-up is approved by the engineer. The aggregate sum of the contractor's price break-up shall be equal to the lump sum contract price.

That payment to the contractor in context with Design engineering, Civil construction including foundation and buildings, Structural fabrication and erection, Supply of equipment, Machinery Erection, Trial Run and commissioning, Final Bill etc., shall be guided as per Clause No.41.6 titled as 'Terms of Payment' of General Terms and Conditions of Contract.

**3. Goods & service Tax (GST):**

- (i) The payment of Goods and Service Tax (GST) & GST (Compensation to State) Cess to the Concerned Government authority will be the responsibility of the contractor.
- (ii) The payment of GST and GST (Compensation to State) Cess by service availer (i.e. CCL) to contractor would be made only on the later submitting a Bill/invoice in accordance with the provision of relevant GST Act and the rules made thereunder and after online filing of valid return on GST portal.
- (iii) In the event of Recovery of any claim towards LD Charges, Penalty, fee, or any other charges from the contractor, the same will be recovered along with the applicable GST and the amount shall be adjusted with the payment to be made to the contractor against their bill/invoice or any other dues.
- (iv) **Input Tax Credit is available to CCL.**

**4. Price Variation (Escalation/De-escalation):**

- (a) That the contract Price shall remain firm remain firm without any Price variation due to escalation for the portion of survey, geo-engineering investigation, design and engineering and supply of equipment, Plant and machineries as envisaged in the scope of work and the price agreed thereon as per the contract except the statutory increase/decrease in taxes and duties as GST, GST (Compensation to State) Cess etc.
- (b) That for the portion of Civil and Structural Works and Erection and commissioning Works of the Plant and machineries, the Price Variation due to Escalation shall follow **CL.No.2** of Additional Terms & Condition of Contract (Price Variation Clause).

*[Handwritten signatures]*



645

- (c) That the base date for working out Escalation/De-escalation is **30.07.2020** i.e. the last date of submission of bid.
- (d) That the ceiling on price variation due to escalation covered under clauses mentioned herein before on the contract, limited to **10%** of that portion of contract Price for which price variation is applicable.

Specification/Quantity as per BOQ / NIT to be strictly complied/adhered to and the same should be linked to payment schedule as per **clause 41** of the General Terms and Conditions of the NIT, so that the variation does not have a bearing on the schedule of work as envisaged.

**5. Contract Period:**

The contract period for this work shall be **2555 days** from the date of commencement which shall be reckoned from the expiry of **30 (thirty) Days** from the receipt of this letter of Acceptance (LOA) / Work order or from the 7<sup>th</sup> day of handing over of the site, whichever is later.

**2555 Days** shall comprise of:

- (i) **730 Days (02 Years)** for Construction including Trial Run, PGT & Commissioning of the Plant.
- (ii) **1825 Days (05 years)** for Operation & Maintenance of Plant during Defect Liability Period.

The date of uploading of this Letter of Acceptance / Work order on e-Procurement Portal ([www.coalindiatenders.nic.in](http://www.coalindiatenders.nic.in)) shall be treated as the date of receipt of this LOA / Work order by you.

**6. Electricity:**

The contractor shall submit to the engineer within thirty (30) days from the date of acceptance of the award letter, his electrical power requirements, if any, to allow the planning of the temporary electrical distribution by the engineer. The contractor shall be provided with supply of electricity for the purposes of the contract, only at one point in the project site. The contractor shall make his own further distribution arrangement. All temporary wiring must comply with local regulations and will be subject to engineer's inspection and approval before connection to supply. Power supply for labour colonies shall also be provided at one point. The contractor shall be charged for the power supplied at work site and labour colonies at prevalent rate of power supplied by State Electricity Board.

**6. Water:**

Supply of water will be made available for the construction purposes at an agreed single point within 100 meters of the work site. And further distribution will be the responsibility of the contractor. The contractor shall be charged for the water supplied at work site @ 1% of the value of civil works and shall be deducted from the contractor's running/final bills.

**7. Employment of Labour:**

As per **CL No. 22** titled as '**Employment of Labour**' of Instruction to Bidder (ITB) and other provision in Tender document, the contractor should abide with the following in context with Employment of Labour:

7.1 Contractors are to employ, to the extent possible (as per policy decision of the company valid from time to time), local project affected people and pay wages not less than the minimum wages as per minimum Wages Act of Central or state govt. or HPC wages of CIL., as defined below:



Payment of Wages to Contractor's Labours	(i) <b>For Construction of Plant:</b> As per Minimum Wages Act of Central/State Govt. (higher).	The latest Rate as per Govt. Notification and as available on the Govt. Website shall be applicable.
	(ii) <b>For Operation &amp; Maintenance of Plant:</b> High Power Committee (HPC) Wages of CIL.	The latest Rate as per CIL. Notification and as available on the Coal India Limited Website (www.coalindia.in) shall be applicable.

Payment of arrears to the contract workers on account of revision of minimum wages shall be the responsibility of the contractor.

Payment of Provident Fund for the workmen employed by him for the work as per the Law prevailing under provision of CMPF/EPF and allied scheme valid from time to time shall be responsibility of the contractor. In all the cases mentioned above, the contractor needs to ensure that the employee has become a member of any of the provident fund as the case may be and the unique membership number of the CMPF/EPF or Allied Scheme needs to be submitted to Employer. In addition to the above, the Contractor shall provide a copy of the updated passbook having entry made in the CMPF/EPF or Allied Scheme(s) of Provident fund as the case may be by the competent authority annually /as and when asked. Bidder shall also submit copies of statutory returns.

7.2 The payment to the contractor's labourers has to be made through Bank only and necessary payment certificate shall be obtained from the authorized representative of the department.

7.3 Bonus is to be paid to the contract workers engaged by the Contractors as per the provisions of Payment of Bonus Act,1965 as amended from time to time.

7.4 The contractors shall register themselves on the Contract Labour Payment Management Portal (CLPMP) of CIL within 30 days of issue of work order and will have to enter and update periodically the following details in the portal:

- i) Work Order details
- ii) Details of Contractor workers and payment of wages in respect of each Work Order each month.

7.5 Contractors should deploy Skilled/Trained worker only.

7.6 All the contract workers shall be covered with the Bio-metric attendance system for payment of wages.

7.7 That you have to comply with statutory requirements of various acts including Child Labour (Prohibition & Regulation) Act, 1986 as mended from time and rules, regulations and scheme framed there under from time to time in addition to other applicable labour laws. If it is reported and provided that child labour is engaged by you, then you will be penalized 10% of the contract value and will be blacklisted.

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647

**8. Insurance Policies:**

You have to take necessary insurance policies required for this work, in compliance with the provision of NIT and Bid Document, in the joint name of **Central Coalfields Limited (CCL)** and the Contractor, **M/s Larsen & Toubro Limited**. The Policies and certificate for insurance shall be delivered by you to the Engineer-in-Charge for his approval before commencement of the work.

**9. Safety**

That you will be responsible for any damage resulting from your operation. You will also be responsible for protection of all persons including members of public and employees of the CCL and the employees of other contractors and sub-contractors and all public and private property including structures, buildings, other plants and equipment and utilities either above or below the ground. You will ensure provision of necessary safety arrangement/equipment such as barriers, sign-boards, warning lights and alarms, etc. to provide adequate protection to persons and property. You will be responsible to give reasonable notice to the Engineer-in-Charge and the owners of public or private property and utilities well in advance, when such property and utilities are likely to get damaged or injured during the performance of your works and shall make all necessary arrangements with such owners, related to removal and/or replacement or protection of such property and utilities.

In case of accident, you will be responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any similar laws in-force and indemnify the Company against any claim on this account.

**10. Worker's Welfare Cess:**

That an amount of **1% (One Percent)** of the work value payable to you will be deducted from all Bills towards the worker's welfare under "The Building and Other Construction Worker's Welfare Cess Act, 1996" and "The Building and Other Construction worker's Welfare Cess Rules, 1998" (as applicable in the State).

**11. Legal Jurisdiction:**

That matters relating to any dispute or difference arising out of this work order and subsequent contract awarded, based on this tender and work order shall be subject to the jurisdiction of Local Court, Chatra, Jharkhand only.

**12.** That you have to submit a detailed PERT network within the time frame agreed as per NIT consisting of adequate number of activities covering all key phase of the works such as design, procurement, manufacturing, shipment, field erection activities etc. within **fifteen (15)** days after the date of acceptance of tender in compliance with **clause No. 6** of General Terms & Conditions of acceptance.

**13.** That as per Clause No.1 titled as '**Definition**' and sub Clause (ix) of General Terms and Condition of Contract, the Engineer-in-Charge for this work will be **General Manager, Amrapali & Chandragupta Area**. General Manager, Amrapali & Chandragupta Area in association with the Staff Officer (E&M) of the Area will be responsible for supervising and administrating the contract, certifying payment due to the contractor, valuing variation to the contract, awarding extension of time and valuing compensation events. Engineering-in-Charge/Designated Officer-in charge may further appoint his representative i.e. another person/project Manager or any other competent person and notify to the contractor who is directly responsible for supervising the work being executed at the site, on his behalf under the Delegation of Powers of the Company. However, overall



148

- responsibility, as far as the contract is concerned will be that of the Engineer-in-Charge/Designated Officer-in-charge.
14. No sub-letting of the work as a whole by the contractor is permissible. Prior permission is required to be taken from the principal employer for engagement of sub-contractor in part work/piece rated work.
  15. That the Paying Authority for this work will be the Area Finance Manager, **Amrapali & Chandragupta area.**
  16. The Bill of Quantities (BOQ) enclosed herewith is a part of this work order.
  17. That you have to submit the following documents and to attend this office for signing the agreement within **30 (Thirty)** days of issuance of this LOA/Work Order:
    - i. Non-Judicial Stamp Paper of ₹ 500.00
    - ii. Site handover and takeover certificate, jointly signed by Engineer-in-Charge and the Contractor.
    - iii. Labour License as per Contractor Labour (Regulation & Abolition) Act, 1970.
    - iv. Insurance Certificate as per Clause 8 of LOA.
    - v. CMPF/EPF Registration certificate.
    - vi. Valid H.T Electrical Contractor's license
    - vii. Detail Time and Progress Chart, jointly signed by Engineer-in-Charge and the Contractor.
    - viii. List of Technical & Supervisory Personnel to be deployed for execution of the work.
    - ix. Integrity Pact on Non-Judicial Stamp Paper of Rs. 500.00.
    - x. Copy of PAN card.
    - xi. Copy of GST Registration Certificate.
    - xii. Copy of Memorandum and Article of association along with Power of Attorney and Board Resolution.
    - xiii. E-payment Mandate form as per NIT.
    - xiv. Any Other document, if Required, as per NIT/Tender document.
  18. The bidder must comply the provision of Public Procurement (Preference to Make in India), Order 2017-Revision vide order no. P-45021/2/2017/PP(BE-II) dtd 16.09.2020 of Ministry of Commerce and Industry, Government of India.
  19. The bidder must comply order no. F. No.6/18/2019-PPD dt 23/7/20 of Ministry of Finance, Dept of Expenditure, Public Procurement Division with respect to "restriction of bidders from a country which shares a land border with India and on sub-contracting to contractors from such countries"
  20. All Other terms and condition as detailed in the NIT and Bid Document and subsequent clarification made thereof with regard to bidder's queries and uploaded on e-procurement portal shall be followed and form an integral part of the contract agreement.

*[Signature]*  
31/12/2020

General Manager(E&M)/HOD, CCL

Enclosure: Schedule of Quantities/BOQ



649

**Copy for kind information:**

1. CMD, CCL
2. Director (Technical)/Operation, CCL
3. Director (Technical)/P&P, CCL
4. Director (Finance), CCL
5. Director (Personnel), CCL

**Distribution**

1. GM(P&P), CCL
2. GM(Fin), CCL
3. GM(P&IR), CCL
4. GM, Amrapali & Chandragupta Area, CCL
5. Sr. Raj Kumar Rajak, PS to CVO, CCL
6. AFM, Amrapali & Chandragupta Area- With reference to BC No. BGT/CB/PP/20-21/250272/1/(67) dated 31.12.2020, Head: **Transportation (CHP)** Ref No (New) Amount- ₹ 1,00,00,000.00 (Rupees One hundred lakhs only). Budget for FY 2021-22 & 2022-23 will be included in respective year of Capital Budget expenditure as per requirement.



*[Handwritten signature]*

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650

**SCHEDULE OF QUANTITIES/ BOQ**

Sl. No.	Item Description	BASIC RATE in Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT Without Taxes in Rs. P
1	<b>WORK &amp; SERVICES</b>		
2	Detailed survey of the area, within the battery limits & submission of reports (Complete work as per Tender document)	10000000.00	10000000.00
3	Sub soil exploration, field and laboratory testing of samples & submission of reports (Complete work as per Tender document)	10000000.00	10000000.00
4	<b>Design Engineering Cost</b>		
5	Preparation and submission of system engineering drawings as per system requirements.	70500000.00	70500000.00
6	GA & detail engineering designs and drawings of all civil and structural included in the system and scope of works (Complete details of the system)	9000000.00	9000000.00
7	G.A. & detailed engineering designs and drawings including working and maintenance manuals of (Complete details of the system): i) all individual equipment ( Mechanical & Electricals) ii) Dust Control & Pressurisation system. iii) Fire-fighting and plant cleaning system. iv) Chutes & Liners v) Communication system vi) Power Supply System vii) Illumination system. viii) OHE system ix) Plant control system ix) Any other system/unit to match the scope of work & requirement	400000.00	400000.00
8	Documentation as per tender specification, complete as per scope of works	100000.00	100000.00
9	<b>CIVIL &amp; STRUCTURAL WORKS</b>		
10	<b>Civil and structural work (Silo, over ground Bunker, crushing stations, Truck receiving hoppers, Conveyor Gantry, Drive &amp; Transfer Houses, Sampler House, etc.)</b>		



51

11	Earthwork in cutting in all types of soil and rock	16000000.00	16000000.00
12	Earthwork in filling	8600000.00	8600000.00
13	Sand filling	9600000.00	9600000.00
14	PCC at all levels as per system requirement	10900000.00	10900000.00
15	RCC (excluding reinforcement) at all levels as per system requirement (M20 grade and above)	230400000.00	230400000.00
16	Supply, bending, binding and placing of Tor steel in position	268320000.00	268320000.00
17	Supply, fabrication and erection of structural steel at all levels as per system requirement	390000000.00	390000000.00
18	Iron profile sheeting at all levels including supply.	28800000.00	28800000.00
19	Liners as per tender document	62480000.00	62480000.00
20	Masonry work	24200000.00	24200000.00
21	Pavement below silo	2000000.00	2000000.00
22	<b>Developmental work and infra-structure as per tender document</b>		
23	Service buildings such as CHP office, First aid centre, Canteen, Security office, Pump houses, Store room etc	4000000.00	4000000.00
24	Substations	25000000.00	25000000.00
25	Workshop shed	250000.00	500000.00
26	Car and cycle parking	500000.00	500000.00
27	Levelling Dressing, arboriculture etc	7200000.00	7200000.00
28	Water Supply Arrangement	50000.00	50000.00
29	Ground water reservoir	200000.00	200000.00
30	Drainage arrangement	10000000.00	10000000.00
31	Boundary wall	200000.00	200000.00
32	Road	5000000.00	5000000.00
33	Lighting Tower	500000.00	500000.00
34	Miscellaneous	50000.00	50000.00
35	<b>C. PLANT &amp; MACHINERY (SUPPLY)</b>		
36	C.(a) SUPPLY: MECHANICAL		
37	CONVEYORS	158460000.00	158460000.00
38	BELTING	57700000.00	57700000.00
39	<b>EQUIPMENT</b>		
40	Receiving Pit including Truck receiving arrangement Mechanical Equipment	104470000.00	104470000.00
41	Equipment involved in Secondary Sizer house	73600000.00	73600000.00
42	Mechanical Equipment in Bunker	70000000.00	70000000.00

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43	Mechanical Equipment at Loading Section	66570000.00	66570000.00
44	Mechanical Equipment at Transfer house	60000000.00	60000000.00
45	OHE equipment including mechanical, civil and electrical requirements	31000000.00	31000000.00
46	Other mechanical equipment	42300000.00	42300000.00
47	Dust suppression system with piping & other accessories. Condition monitoring system, Safety & firefighting system, and other misc. equipment/utility for any more item required to complete the project	85900000.00	85900000.00
48	<b>C.(b) SUPPLY: ELECTRICAL</b>		
49	<b>Over Head Line Feeders</b>		
50	a).6.6 kV Over Head line feeders on 52km/m rail pole along with suitable cable, lightning arrestors, isolators etc. for receiving power at Substation-A from proposed Substation-II & Substation-A to B. b)415 kV Over Head line feeders on 52kg/m rail pole along with suitable cable, lightning arrestors, isolators etc. for receiving power at Silo MCC Room from Substation-B.	7300000.00	7300000.00
51	<b>Substation-A (Ref. Drawing No.-R3:E&amp;M:0E3091 &amp; Technical Specification at Sub Section 7.4.2 )</b>		
52	a) 6.6 kV Lightning arrestors. b).6.6 kV Isolators with earthing switch. c). 6.6 kV Switchboard No. 1A comprising of 15 nos. of 6.6 kV Vacuum Circuit Breaker Panels complete with metering and protection system (Refer drawing no. R3:E&M:0E3091 and technical specification) at Substation A -01 no d) 6.6 kV Switchboard No. 2A comprising of 2 nos 6.6 kV Panel for trunking of incoming cable from 6.6 kV Sectionalized Switchboard Panel 1A, 1 no. of 6.6 kV Vacuum Circuit Breaker Panels as Bus Coupler and 12 nos. of vacuum contractor panels complete with metering and protection system (Refer drawing no. R3:E&M:0E3091, and technical specification) at Substation A -01 no. e) 6.6/230V (L-L). 100 kVA indoor Lighting Transformer f) 6.6/0.415 kV. 500 kVA indoor Distribution transformer g) 415V, 1000 A AL Bus-duct - 2 Nos. h) 415 V sectionalized Motor Control Centre (MCC) at substation A comprising of 2 nos. of Incomer ACBs, 1 no. of Bus-Coupler ACB and required nos. of outgoing Feeders for supply of power to LT equipment like Vibro feeder, EOT Crane, Electrical	25000000.00	25000000.00

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	Hoist, Rock Breaker, Metal detector & Magnetic separator, Dust Suppression, Firefighting system, Conveyor Brake, Tripper Conveyor, Belt Weigher, Flap gates, Welding sockets etc. complete with metering and protection system (Refer drawing no. R3:E&M:0E3091 and technical specification)- lot		
53	<b>Substation-B (Ref. Drawing No.- R3:E&amp;M:0E3092 &amp; Technical Specification at Sub Section 7.4.2 )</b>		
54	a) 6.6 kV Lightning arrestors b).6.6 kV Isolators with earthing switch c) 6.6 kV Switchboard No. 1B comprising of 13 nos. of 6.6 kV Vacuum Circuit Breaker Panels complete with metering and protection system (Refer drawing no. R3:E&M:0E3092 and technical specification) at Substation B -01 no. d) 6.6 kV Switchboard No. 2B comprising of 2 nos 6.6 kV Panel for trunking of incoming cable from 6.6 kV Sectionalized Switchboard Panel 1B, 1 nos. of 6.6 kV Vacuum Circuit Breaker Panels as Bus Coupler and 06 nos. of vacuum contractor panels complete with metering and protection system (Refer drawing no. R3:E&M:0E3092 and technical specification) at Substation B -1 no. e) 6.6/230V (L-L), 63 kVA indoor Lighting Transformer f) 6.6/0.415 kV, 315 kVA indoor Distribution transformer g) 415V, 800 A AL Bus-duct - 2 Nos. h)415 V sectionalized Motor Control Centre (MCC) at substation B comprising of 2 nos. of Incomer ACBs, 1 no. of Bus-Coupler ACB, and required nos. of outgoing Feeders for supply of power to LT equipment like Plough Feeders, RLS, Sampling System, Conveyor Brakes, Electrical Hoist, EOT Crane, Dust Suppression, Firefighting system, Flap gates, Welding sockets etc. complete with metering and protection system (Refer drawing no. R3:E&M:0E3092, and technical specification)- lot	33100000.00	33100000.00
55	<b>Silo MCC (Ref. Drawing - R3:E&amp;M:0E3093 and technical specification at Sub Section 7.4.2)</b>		

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56	a) 415 V sectionalized Motor Control Centre (MCC) at Silo MCC room comprising of 2 nos. of Incomer ACBs, 1 no. of Bus-Coupler ACB and required nos. of outgoing Feeders for supply of power to LT equipment like compressor, Hydraulic power pack, Motorised Gates, Control room pressurisation & Air conditioners, Welding sockets, lift and other required items installed at silo complex (Refer drawing no. R3:E&M:0E3093, and technical specification)- lot. b) 415 V suitable Power Supply arrangement for sampler system (Refer technical specification) - Lot.	15100000.00	15100000.00
57	<b>Control console (Ref. Drawing - R3:E&amp;M:0E3094 and technical specification at Sub Section 7.4.2)</b>		
58	a) Control console for control of electrical drives connected to sub-station A, B and Silo MCC complete with microprocessor based PLC having hot redundant CPUs & memory, audio-visual signalling, fault annunciation system, interlocking, printer, VDUs etc. and sequence operation of equipment of Zone A, B, C and entire plant b) Remote and sequence control equipment/ accessories including Local Control Stations, Traffic Control System etc. as required for plant control.	40300000.00	40300000.00
59	<b>Cables &amp; accessories comprising of the following:</b>		
60	a) 6.6 kV grade, XLPE, single wire armoured aluminium conductor, FRLS cables of different sizes for supply of power to 6.6 kV panels, drives & other equipment as per technical specification- lot. b) 1.1kV grade, PVC insulated, PVC sheathed single wire armoured aluminium conductor FRLS cables of different sizes for power supply to panels drives and other equipment as per technical specification - lot c) 1100/660 V grade, PVC insulated, PVC sheathed, single wire armoured, Aluminium conductor, FRLS cables of different sizes as per technical specification - lot d) 1100/660 V grade, single/multi core PVC insulated and sheathed, Copper conductor, FRLS, control and signalling cables of 2.5 sq. mm cross-section having different no. of cores as per technical specification.-lot e) Cable trays/cable racks (separate trays shall be used for power and control cables), cable trenches & cable vaults etc - lot	69100000.00	69100000.00
61	<b>Illumination system comprising of the following:</b>		



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62	<p>a) 230V(L-L) Main Lighting Distribution Board with incoming MCCB and outgoing MCCBs/MCBs-lot</p> <p>b) Lighting Distribution Boards with incoming and outgoing MCCBs / MCBs - lot</p> <p>c) LED Lamp/ fixtures (Industrial/decorative/dust tight type) as per requirement complete with control gears, accessories - lot</p> <p>d) LED Lamp (Street light/ Flood lights type) as per requirement complete with control gears, accessories etc as per technical specification- lot</p> <p>e) Street lighting poles of suitable height embedded with conduit and bracket.-lot</p> <p>f) Fixed type lighting tower for suitable locations in CHP (15-20 m high) fitted with Suitable LED flood light fixtures. - 4 nos</p> <p>g) Miscellaneous items like junction boxes complete with fuse, terminal block and other necessary accessories, cable glands, lugs, conduits, receptacles - lot.</p> <p>h) DG set of required capacity for emergency lights with required switchgear for automatic on-off and changeover - 3 nos.</p> <p>i) Digital clock based arrangement with all accessories and terminal for automatic switching ON/OFF of outdoor lights- 1 no.</p>	10000000.00	10000000.00
63	<b>Welding System: (as per technical specification at Sub Section 7.4.2)</b>		
64	<p>a) Transformer welding set 400A complete with cables and accessories 5 nos, out of which 3 nos. to be housed in rooms (size 2 m x 3 m x 3 m each approx., one number for each Zone) - 5 Nos.</p> <p>b) Motor generator welding set DC 600A complete with cables and accessories 5 nos, out of which 3nos. to be housed in rooms (size 2 m x 3 m x 3 m each approx., two numbers Stand by) - 5 Nos</p> <p>c) 1.1kV grade, PVC insulated and sheathed single layer armoured, FRLS, Aluminium conductor cables for power supply to welding sockets. - lot</p> <p>d) Dust proof welding receptacles complete with protective device, and accessories throughout the plant- lot</p>	5700000.00	5700000.00
65	<b>Earthing &amp; Lightning Protection (as per technical specification at Sub Section 7.4.2)</b>		



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66	a) Galvanised iron earthing strips / wires / conductors for main earthing grid, sub earthing grid of substations, building and structures, earthing of light fittings, welding sockets, pull chord switches, belt sway switches, zero speed switches and various electrical equipment including of entire plant Ground electrodes and earthing pits as per technical specification - lot b) Equipment and accessories for Lightning protection system for building and structures having height of 10m and above with separate earth pits.- lot	9000000.00	9000000.00
67	<b>Capacitor Bank (6.6 KV Side) (Refer drawing no. R3:E&amp;M:0E3091, R3:E&amp;M:0E3092 and technical specification):</b>		
68	a) 6.6 kV indoor Capacitor Bank of required capacity with automatic P.F. correction relay at Substation A for improvement of Power Factor. b) 6.6 kV indoor Capacitor Bank of required capacity with automatic P.F. correction relay at Substation B for improvement of Power Factor.	4300000.00	4300000.00
69	<b>Capacitor Bank (0.415 KV Side) (Refer drawing no. R3:E&amp;M:0E3091, R3:E&amp;M:0E3092 and technical specification):</b>		
70	a) 415 V indoor Capacitor Bank of required capacity with automatic P.F. correction relay at Substation A for improvement of Power Factor. b) 415 V indoor Capacitor Bank of required capacity with automatic P.F. correction relay at Substation B & Silo MCC for improvement of Power Factor. (Refer drawing no. R3:E&M:0E3092, R3:E&M:0E3094 and technical specification)	2000000.00	2000000.00
71	<b>Miscellaneous Equipment comprising of the following:</b>		



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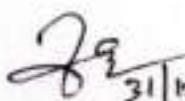
72	<p>a) 415V DOL Starters - lot  b) 110V Lead Acid Battery complete with Battery Charging unit at Substation-A, B &amp; Silo MCC- 03 Nos.  c) 415/110V control transformer for AC control supply at Substation-A &amp; B and Silo MCC Room- 06 Nos  d) 415/110V control transformer with necessary converter for DC control supply /110V DC Float cum charger for batteries at Substation-A &amp; B and Silo MCC Room.- 03 Nos  e) Latest Model of PC, with LCD Monitor, DVD drive and with laser printer complete with UPS of 30 minutes back-up. - 02 Nos  f) Laptop latest model, for re-loading the software in PLC/PC -01 Nos.  g) Air conditioners 1.5 Ton Capacity - lot  h) Exhaust and ceiling fans- lot  i) 5kVA UPS for PLC control with minimum 30 minutes battery backup capacity- 03 Nos.  j) Aluminium portable telescopic ladders- 02 Nos.  k) Insulating mats as per IS for sub-stations, MCC rooms and control rooms- lot  l) Insulating mats as per IS for sub-stations, MCC rooms and control rooms- lot  m) Automatic Fire Detection &amp; annunciation system in whole plant and power supply to automatic firefighting equipment- lot  n) Equipment and accessories for Pressurisation at Substation-A &amp; B and Silo MCC Room -lot  o) Voltage stabiliser for control circuit - lot  p) Miscellaneous items such testing equipment, portable firefighting equipment for sub-stations and other safety equipment as per relevant Indian Standard &amp; Indian Electricity Rules. Furniture for control rooms and substation buildings etc.</p>	10000000.00	10000000.00
73	<b>Communication system:</b>		
74	<p>a) Project administrative communication system complete with automatic pushbutton type telephone sets at various location of Silo, MCC and control Room of sub-stations etc. including wiring of all sets up to a common junction box and connected to main auto exchange for external connection.  b) Industrial type duplex loud hailing plant intercom system complete with cabling accessories etc. as per technical specification.  c) Visual communication system with industrial type CCTV</p>	9000000.00	9000000.00



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75	Any other equipment specifically not mentioned but necessary for efficient operation of plant under this package- lot	100000.00	100000.00
76	<b>C1. ERECTION, INSTALLATION &amp; COMMISSIONING</b>		
77	Erection of mechanical equipment	68700000.00	68700000.00
78	Erection of electrical equipment	22000000.00	22000000.00
79	Erection of other plant and machining etc.	5000000.00	5000000.00
80	Trial run, and commissioning of the plant	5000000.00	5000000.00
81	Trial run, Testing, and commissioning of the OHE System underneath silo	5000000.00	5000000.00
82	<b>C2. OTHERS ITEM</b>		
83	Drinking water system consisting of tanks, pipes, valves, taps etc.	300000.00	300000.00
84	Plant cleaning system	200000.00	200000.00
85	Any other item left out for completion of the project	100000.00	100000.00
86	<b>C3. MAINTENANCE AND TRAINING</b>		
87	Operation of the plant for five year after commissioning	120000000.00	120000000.00
88	Maintenance of the plant for five year after commissioning	119950000.00	119950000.00
89	Training of the employer personnel as per tender document	50000.00	50000.00
<b>Total in Figures</b>			₹ 254,08,00,000.00
<b>Total GST @ 18%</b>			₹ 45,73,44,000.00
<b>Contract Price</b>			₹ 2,99,81,44,000.00

  
 31/12/2020  
General Manager (E&M)/HOD, CCL





Validity unknown

Digitally signed by VM KUMAR SINGH  
 Date: 2020.12.31 17:23:21 IST  
 Location: Coal India Limited-CIL



No. J-11015/109/2003-IA-II (M)  
Government of India  
Ministry of Environment, Forest and Climate Change  
Impact Assessment Division

\*\*\*\*\*

Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi - 3

Dated: 20<sup>th</sup> March, 2020

To,

The Head of Department (Environment & Forest),  
M/s Central Coalfields Limited,  
Darbhanga House,  
Ranchi - 834029 (Jharkhand)  
Email: [envcecl@yahoo.com](mailto:envcecl@yahoo.com)

**Sub:** Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand) - For Environment Clearance under Clause 7(ii) of EIA Notification, 2006 - reg.

Sir,

This has reference to your online proposal no. 1A/JH/CMIN/123390/2019 on 10<sup>th</sup> January, 2020, on the above-mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of Environment Clearance under Clause 7(ii) of EIA Notification, 2006 to Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand).

3. The proposal was earlier considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Sector in its 53<sup>rd</sup> meeting held on 20<sup>th</sup> February, 2020. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under: -

- (i) The project area is covered under Survey of India Topo Sheet No: 73-A/13 and is bounded by the geographical coordinates ranging from 23°51'31'' to 23° 53'38''N latitude 84° 58'35'' to 85° 02' 07'' E longitude.
- (ii) Coal linkage of the project is proposed for generation of Energy Sector for various customers through Basket linkage. At present coal is being transported through Shivpur railway siding. A new railway siding, Amrapali siding adjacent to the mine boundary is under commissioning. In future, it is proposed to dispatch coal through Amrapali railway siding.

Expansion of EC – Amrapali OCP of M/s Central Coalfields Limited

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Page 1 of



660

- (iii) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC vide its OM dated 13th January 2010 has imposed moratorium on grant of environment clearance.
- (iv) Employment generation: The project has given a boost to the economy of the area by providing primary and secondary employment to local people. Total number of permanent & temporary employment is approximately 650.
- (v) The project is reported to be beneficial in terms of improvements in Physical Infrastructure; Improvements in Social Infrastructure; Increase in Employment Potential; Contribution to the Exchequer; Meet energy and steel sector requirement; Productive utilization of existing manpower of project.
- (vi) Earlier, Environment Clearance to the project was obtained under EIA Notification-1994 vide Ministry's letter No J-11015/109/2003-IA.II(M) dated: 03.01.2006 for 12 MTPA in project area of 1426.08 Ha. MoEF&CC through its notification vide no: S.O 1530 (E) dt. 16.04.2018 has directed that "The mining projects which were granted EC under EIA notification 1994 and but not obtained EC for expansion/ modernization/ amendment under the EIA notification 2006 shall make an application in Form I within six months from the date of issue of this notification for grant of EC under the provisions of the EIA notification, 2006". EAC(Coal) has recommended for revalidation of the Environment Clearance Dated: 03.01.2006, as mandated under the Ministry's Notification dated 6<sup>th</sup> April, 2018.
- (vii) Mining Plan (including Progressive Mine Closure Plan) has been approved by the CCL Board meeting held on 04.11.2019.
- (viii) The land usage pattern of the project is as follows:

Pre-mining land use details:

Description	Forest Area in Ha.	Non-Forest Area in Ha.	Total Area in Ha.
Quarry	392.75	32.47	425.22
Dump	60.14	29.02	89.16
Nala	2.85	0.25	3.10
Workshop	14.48	0	14.48
Chp	6.27	0	6.27
Sub Stn./Office	6.00	0	6.00
Haul Road	30.00	4.00	34.00
Safety Zone	4.70	14.22	18.92
Embankment/Garland Drain/ Diversion Of Public Road	14.45	8.27	22.72
<b>Total</b>	<b>531.64</b>	<b>88.23</b>	<b>619.87</b>



*Amrapali*

## Post-mining land use details:

Description	Total Area in Ha	Description	Total Area in Ha
Quarry	425.22	Plantation on backfilled area	271.71
		Void	153.51
Dump	89.16	Plantation on External Dump	89.16
Nala	3.10	Nala	3.10
Workshop	14.48	Industrial Area	26.75
Chp	6.27		
Sub Stn./Office	6.00		
Haul Road	34.00	Haul Road	34.00
Safety Zone	18.92	Plantation on Safety Zone/Green belt	18.92
Embankment/Garland Drain/ Diversion Of Public Road	22.72	Embankment/Garland Drain/ Diversion Of Public Road	22.72
<b>Total</b>	<b>619.87</b>	<b>Total</b>	<b>619.87</b>

- (ix) Total geological reserve is 486.50 MTe in Amrapali Block and 203.31 Mtes in Kishanpur Block. The mineable reserve is 114.59 MT, extractable reserve is 114.59 MT. The percent of extraction would be 100 %.
- (x) 08 seams with thickness ranging from 1 m – 20 m are workable. Grade of coal is Grade-F, stripping ratio 0.99, while gradient is 3° to 7°.
- (xi) The method of mining would be opencast method of mining with Surface miner and shovel-dumper combination.
- (xii) The balance life of mine is 9 years.
- (xiii) The project has 1 external OB dumps in an area of 89.16 Ha with 60 m height and 16.86 Mm<sup>3</sup> of OB. 2 internal OB in an area of 271.71 ha with 109.62 Mm<sup>3</sup> of OB is envisaged in the project.
- (xiv) Total Quarry area is 425.22 Ha. The final mine void would be in 153.50 Ha with depth an average up to 90 m below GL. Backfilled quarry area of 271.71 Ha shall be reclaimed with plantation. Final mine void will be converted into water body.
- (xv) Transportation of coal has been proposed by dumper from mine pithead, from surface to siding by tipping trucks.
- (xvi) Reclamation Plan in an area of 379.25 Ha, comprising of 89.16Ha of external dump and 271.71 Ha of internal dump and 18.92 ha of green belt & safety zone.

- (xvii) 531.64 ha of forestland has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 531.64 Ha of forestland for non-forestry purposes has been obtained vide MoEF&CC letter No. F.No.8-48/2008-FC Dt.12.10.2010.
- (xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- (xix) The ground water level has been reported to be varying between 6.50 m to 10 m during pre-monsoon and between 0.95 m to 6.50 m during post-monsoon. Total water requirement for the project is 3357 KLD.
- (xx) Application for obtaining the approval of the Central Ground Water Authority has been submitted vide no: 21-4/328/JH/MIN/2018 Dated: 29.12.2018.
- (xxi) Public hearing for the project of 12 MTPA capacity in an area of 1426.08 Ha was conducted on 02.03.2003. Major issues raised in the public hearing include mitigation of air & water pollution, compensation, employment opportunity, medical facilities & provision of drinking water etc. Appropriate action to address the issues raised in the Public Hearing have already been taken.
- (xxii) Consent to Operate/Establish for the existing capacity was obtained from the Jharkhand State PCB on 30.06.2019 and is valid till 30.06.2020.
- (xxiii) Chundru and Barki rivers flowing west to east and north to south respectively control the drainage of the block. The Barki River marks the eastern boundary of the property with a safe distance of about 100 mtrs.
- (xxiv) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to JSPCB and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations, which can be attributed to the specific local conditions during the day of sampling.
- (xxv) No court cases or violation cases are pending against the project of the PP.
- (xxvi) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. The coal production from the mine was started from the year 2013-14 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations. The coal production, realized from the project, from 1993-94 onwards, is as under:

Year	Coal (Million tes)	OBR(Mcum)
2013-14	-	2.54
2014-15	2.55	17.74
2015-16	4.79	6.24



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2016-17	6.23	4.19
2017-18	6.5	6.965
2018-19	10.2	12.2

(xxvii) The project involves 452 project-affected families. R&R of the PAPs will be done as per R&R Policy of CIL.

(xxviii) Total cost of the project is Rs. 85,811 Lakhs. Environment Management Cost is Approximately Rs. 8,900 lakhs

4. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent. The EAC in 53<sup>rd</sup> meeting held on 20<sup>th</sup> February, 2020 has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

5. The sectoral Expert Appraisal Committee after detailed deliberations and in exercise of the provisions contained in para 7(ii) of the EIA Notification, 2006 and consideration of the parameters mentioned in the Ministry's OM dated 15<sup>th</sup> September, 2017, exempted the project from public hearing, and recommended for grant of Environment Clearance.

6. The Expert Appraisal Committee in 53<sup>rd</sup> meeting held on 20<sup>th</sup> February, 2020 has recommended the project for grant of Environment Clearance. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval for expansion of **Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand)**, under the provision of clause 7(ii) of EIA Notification, 2006 and under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions in addition to the standard environmental conditions notified by the ministry and mentioned below:

- (i) EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
- (ii) The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 14.4 MTPA (Peak) prior to commencement of the increased production.
- (iii) Transportation of coal from Coal Handling Plant shall be through covered trucks.
- (iv) To control the production of dust at source, the crusher and in-pit belt conveyors shall be

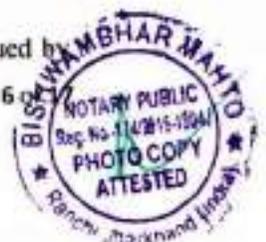


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provided with mist type sprinklers.

- (v) PP shall implement inpit conveyor to railway siding through silo loading in three years.
- (vi) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.
- (vii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (viii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (ix) Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (x) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (xi) The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 14.4 MTPA (Peak).
- (xii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (xiii) A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.
- (xiv) Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (xv) Compliance of the non-compliance/partial compliance conditions certified by Regional Office, Nagpur vide its Letter dated 4<sup>th</sup> December, 2019. The PP shall complete all non-compliance/partial compliance conditions in one year and the Action taken report shall be submitted to the Regional Office of the MoEF&CC.
- (xvi) Project proponent to plant 100,000 nos. of native trees with broad leaves along the villages and 50,000 nos of native trees along transportation route to prevent the effect of air pollution in 2 years. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.
- (xvii) The activities and fund provisions for CER shall be made as per the guidelines issued by

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the ministry regarding CER on 1<sup>st</sup> May, 2018.

- (xviii) Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xix) The Project Proponent shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xx) Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- (xxi) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antsnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xxii) Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (xxiii) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.

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Page 7 of 17  
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- (xxiv) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- (xxv) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.
- (xxvi) Amrapali Railway siding shall be completed in 3 years and road transportation to Balumath railway siding will be stopped accordingly.
- (xxvii) The distance of atleast 100 m shall be kept from Barki River and Bahut Chuha nala with no mine water discharge.
- (xxviii) Project Proponent shall comply to the observation in show cause notice dated 12<sup>th</sup> December, 2018 regarding non-compliance of earlier EC and necessary report should be submitted to the Regional Office, Ranchi within stipulated time.

7.1 The grant of environmental clearance is further subject to compliance of the Standard EC conditions as under:

**(a) Statutory compliance**

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).

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667

- (iv) The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi) Solid/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

**(b) Air quality monitoring and preservation**

- (i) Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- (ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- (iii) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM<sub>10</sub>/PM<sub>2.5</sub>) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- (iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- (v) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.

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668

- (vi) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- (vii) Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.
- (c) **Water quality monitoring and preservation**
  - (i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25<sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board.
  - (ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-1A.11 (M) dated 27<sup>th</sup> May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
  - (iii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
  - (iv) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
  - (v) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
  - (vi) Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of

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(iii) The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

**(e) Mining Plan**

(i) Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.

(ii) Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).

(iii) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.

(iv) Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

**(f) Land reclamation**

(i) Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).

(ii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27<sup>th</sup> August, 2009 and subsequent amendments.

(iii) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.

(iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD) if any, along with fly ash for external dump of overburden, backfilling of mine

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671

Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.

- (v) Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
- (vi) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.
- (g) Green Belt**
  - (i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
  - (ii) 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. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.
- (h) Public hearing and Human health issues**
  - (i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.
  - (ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

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- (iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- (iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- (v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

**(i) Corporate Environment Responsibility**

- (i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
- (ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

**(j) Miscellaneous**

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673

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (vi) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.11 (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
- (vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (viii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- (ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

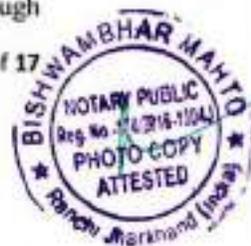
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274

- (xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
  - (xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
  - (xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  - (xiv) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  - (xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
  - (xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
8. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.
  9. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
  10. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
  11. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2<sup>nd</sup> August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.
  12. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through

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675

their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.

13. This Environment Clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.
14. This issues in supersession of the earlier EC granted vide letter dated 3<sup>rd</sup> January, 2006 an 28<sup>th</sup> February, 2020.

*Manoj Kumar Gangeya*  
20.3.2020  
(Manoj Kumar Gangeya)  
Director

**Copy to:**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi
3. The Additional Principal Chief Conservator of Forests, Regional office (ECZ), Ministry of Environment & Forests, Bungalow No. A-2, Shyamali Colony, Ranchi - 834002
4. The Member Secretary, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurwa, Ranchi
5. CMD, M/s Central Coalfields Limited.
6. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
7. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
8. The District Collector, Chatra, Government of Jharkhand
9. Monitoring File      10. Guard File      11. Record File.      12. Notice Board

*Manoj Kumar Gangeya*  
20.3.2020  
(Manoj Kumar Gangeya)  
Director

**GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE  
(IMPACT ASSESSMENT DIVISION)  
(COAL MINING SECTOR)**

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**SUMMARY RECORD OF 53<sup>rd</sup> MEETING OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF COAL MINING PROJECTS CONSTITUTED UNDER THE EIA NOTIFICATION, 2006, HELD ON 20<sup>th</sup> February, 2020.**

The 53<sup>rd</sup> meeting of the Expert Appraisal Committee (EAC) for Coal mining projects was held on 20 February, 2020 in the Ministry of Environment, Forest and Climate Change at Teesta Meeting Hall, Vayu Wing, First Floor, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi to consider the proposals relating to coal mining sector. The following members were present:

1.	Dr. Navin Chandra	-	Chairman
2.	Dr. N. P. Shukla	-	Member
3.	Shri. S. D. Vora	-	Member
4.	Dr. J.K. Pandey	-	Member
5.	Shri G.P. Kundargi	-	Member
6.	Dr. R K. Giri	-	Member
7.	Dr. R.B. Lal, Scientist 'E', MoEFCC	-	Member Secretary
MoEF&CC			
8.	Shri Munna Kumar Shah, Scientist 'D'	-	MoEFCC

**Confirmation of Minutes of 52<sup>nd</sup> meeting of EAC**

There being no comments from any of the members of the Committee, minutes of the 52<sup>nd</sup> meeting of the EAC held on during 24<sup>th</sup> January, 2020 were confirmed in the presence of the members who had been present in the 53<sup>rd</sup> meeting of EAC.

**Discussions on the Reports of Basundhara (West) Extension OCP of 8.75 MTPA (Agenda No- 52.1, EAC Meeting held on 24.01.2020) as well as Batura OCP of 2.00 MTPA Normative and 3.00 MTPA Peak (Agenda No- 52.3, EAC Meeting held on 24.01.2020), being prepared by CMPDI:**

The EAC was informed that CMD, CMPDI vide email dated 19.02.2020 has taken the issues at utmost seriousness and sincerity for improvement of the EIA/EMP Report for the Coal Mining Projects. CPMDI has reported that they have initiated root cause analysis for better preparation of the EIA/EMP Report for the Coal Mining Projects. The EAC deliberated the issues and is of the view that CMPDI shall prepare good quality of the reports and its mitigation measures for sustainable coal mining in the Country.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.



677

hearing process. If any part of data/information submitted is found to be false/misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. Issues raised during the public hearing has been properly addressed in the EIA/EMP report. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

**53.6.4** The EAC, therefore, after deliberations observed the following observation and desired that PP should submit the details for further consideration of the project.

- (i). PP shall revise the approved mine plan for including proposed peak capacity calendar program of the Mine Plan (including Mine closure Plan)
- (ii). Air Quality data of PM10, PM2.5 at certain monitoring stations are high. PP must provide extra mitigation measures to reduce the dust pollution viz-a-viz impact on nearby villages.
- (iii). PP shall conduct baseline monitoring for two months on same monitoring station for comparison with the monitoring data (as in EIA)
- (iv). Approved Wildlife Conservation Plan for identified schedule I species should be submitted.
- (v). PP shall carryout Air Quality modelling for SOx and NOx and report on its impact and mitigation should be prepared
- (vi). Permission for disposal of OB dump to create Embankment along with the bank of river shall be taken from concerned authority of state government.
- (vii). Permission for diversion of irrigation canal and its impact on hydrogeology shall also be studied.
- (viii). The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity.
- (ix). The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1<sup>st</sup> May, 2018.
- (x). PP shall provide action plan with timeline for partial compliances reported in Certified compliance report by Ministry's Regional Office dated 19<sup>th</sup> August, 2019.

The Proposal was **deferred**.

**Agenda No.53.7**

**Amrapali Opencast Coal Mine from 12 MTPA to 16.8 MTPA in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand) – For Environmental Clearance under Clause 7(ii) of the EIA Notification, 2006.**

**[Proposal No. IA/JH/CMIN/123390/2019; F.No. J-11015/109/2003-IA. II(M)]**



**53.7.1** The proposal is for Environmental Clearance for Amrapali Opencast Coal Mine project of Amrapali Opencast Coal Mine from 12 MTPA to 16.8 MTPA in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand).

**53.7.2** The details of the project, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under: -

- (i) The project area is covered under Survey of India Topo Sheet No: 73-A/13 and is bounded by the geographical coordinates ranging from 23°51'31" to 23° 53'38"N latitude 84° 58'35" to 85° 02' 07" E longitude.
- (ii) Coal linkage of the project is proposed for generation of Energy Sector for various customers through Basket linkage. At present coal is being transported through Shivpur railway siding. A new railway siding, Amrapali siding adjacent to the mine boundary is under commissioning. In future, it is proposed to dispatch coal through Amrapali railway siding.
- (iii) Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC vide its OM dated 13th January 2010 has imposed moratorium on grant of environment clearance.
- (iv) Employment generation: The project has given a boost to the economy of the area by providing primary and secondary employment to local people. Total number of permanent & temporary employment is approximately 650.
- (v) The project is reported to be beneficial in terms of improvements in Physical Infrastructure; Improvements in Social Infrastructure; Increase in Employment Potential; Contribution to the Exchequer; Meet energy and steel sector requirement; Productive utilization of existing manpower of project.
- (vi) Earlier, the environment clearance to the project was obtained under EIA Notification-1994 vide Ministry's letter No J-11015/109/2003-IA.II(M) dated: 03.01.2006 for 12 MTPA in project area of 1426.08 Ha. MoEF&CC through its notification vide no: S.O 1530 (E) dt. 16.04.2018 has directed that "The mining projects which were granted EC under EIA notification 1994 and but not obtained EC for expansion/ modernization/ amendment under the EIA notification 2006 shall make an application in Form I within six months from the date of issue of this notification for grant of EC under the provisions of the EIA notification, 2006". EAC(Coal) has recommended for revalidation of the environmental clearance Dated: 03.01.2006, as mandated under the Ministry's Notification dated 6<sup>th</sup> April, 2018.
- (vii) Mining Plan (including Progressive Mine Closure Plan) has been approved by the CCL Board meeting held on 04.11.2019.
- (viii) The land usage pattern of the project is as follows:

Pre-mining land use details:

Description	Forest Area in Ha.	Non-Forest Area in Ha.	Total Area in Ha.
Quarry	392.75	32.47	425.22
Dump	60.14	29.02	89.16
Nala	2.85	0.25	3.10
Workshop	14.48	0	14.48
Chp	6.27	0	6.27
Sub Stn./Office	6.00	0	6.00
Haul Road	30.00	4.00	34.00
Safety Zone	4.70	14.22	18.92

579

Embankment/Garland Drain/ Diversion Of Public Road	14.45	8.27	22.72
<b>Total</b>	<b>531.64</b>	<b>88.23</b>	<b>619.87</b>

Post-mining land use details:

Description	Total Area in Ha	Description	Total Area in Ha
Quarry	425.22	Plantation on backfilled area	271.71
		Void	153.51
Dump	89.16	Plantation on External Dump	89.16
Nala	3.10	Nala	3.10
Workshop	14.48	Industrial Area	26.75
Chp	6.27		
Sub Stn./Office	6.00		
Haul Road	34.00	Haul Road	34.00
Safety Zone	18.92	Plantation on Safety Zone/Green belt	18.92
Embankment/Garland Drain/ Diversion Of Public Road	22.72	Embankment/Garland Drain/ Diversion Of Public Road	22.72
<b>Total</b>	<b>619.87</b>	<b>Total</b>	<b>619.87</b>

- (ix) Total geological reserve is 486.50 MTe in Amrapali Block and 203.31 Mtes in Kishanpur Block. The mineable reserve is 114.59 MT, extractable reserve is 114.59 MT. The percent of extraction would be 100 %.
- (x) 08 seams with thickness ranging from 1 m – 20 m are workable. Grade of coal is Grade-F, stripping ratio 0.99, while gradient is 3° to 7°.
- (xi) The method of mining would be opencast method of mining with Surface miner and shovel-dumper combination.
- (xii) The balance life of mine is 9 years.
- (xiii) The project has 1 external OB dumps in an area of 89.16 Ha with 60 m height and 16.86 Mm<sup>3</sup> of OB. 2 internal OB in an area of 271.71 ha with 109.62 Mm<sup>3</sup> of OB is envisaged in the project.
- (xiv) Total Quarry area is 425.22 Ha. The final mine void would be in 153.50 Ha with depth an average up to 90 m below GL. Backfilled quarry area of 271.71 Ha shall be reclaimed with plantation. Final mine void will be converted into water body.
- (xv) Transportation of coal has been proposed by dumper from mine pithead, from surface to siding by tipping trucks.
- (xvi) Reclamation Plan in an area of 379.25 Ha, comprising of 89.16Ha of external dump, 271.71 Ha of internal dump and 18.92 ha of green belt & safety zone.
- (xvii) 531.64 ha of forestland has been reported to be involved in the project. Approval under the Forest (Conservation) Act, 1980 for diversion of 531.64 Ha of forestland for non-forestry purposes has been obtained vide MoEF&CC letter No. F.No.8-48/2008-FC Dt.12.10.2010.
- (xviii) No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.



630

- (xix) The ground water level has been reported to be varying between 6.50 m to 10 m during pre-monsoon and between 0.95 m to 6.50 m during post-monsoon. Total water requirement for the project is 3357 KLD.
- (xx) Application for obtaining the approval of the Central Ground Water Authority has been submitted vide no: 21-4/328/JH/MIN/2018 Dated: 29.12.2018.
- (xxi) Public hearing for the project of 12 MTPA capacity in an area of 1426.08 Ha was conducted on 02.03.2003. Major issues raised in the public hearing include mitigation of air & water pollution, compensation, employment opportunity, medical facilities & provision of drinking water etc. Appropriate action to address the issues raised in the Public Hearing have already been taken.
- (xxii) Consent to Operate for the existing capacity was obtained from the Jharkhand State PCB on 30.06.2019 and is valid till 30.06.2020.
- (xxiii) Chundru and Barki rivers flowing west to east and north to south respectively control the drainage of the block. The Barki River marks the eastern boundary of the property with a safe distance of about 100 mtrs.
- (xxiv) Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to JSPCB and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations, which can be attributed to the specific local conditions during the day of sampling.
- (xxv) No court cases or violation cases are pending against the project of the PP.
- (xxvi) The project does not involve violation of the EIA Notification, 2006 and amendment issued there under. The coal production from the mine was started from the year 2013-14 onwards. No excess production of coal from the sanctioned capacity has been realized since the commencement of mining operations. The coal production, realized from the project, from 1993-94 onwards, is as under:

Year	Coal (Million tes)	OBR(Mcum)
2013-14	-	2.54
2014-15	2.55	17.74
2015-16	4.79	6.24
2016-17	6.23	4.19
2017-18	6.5	6.965
2018-19	10.2	12.2

- (xxvii) The project involves 452 project-affected families. R&R of the PAPs will be done as per R&R Policy of CIL.
- (xxviii) Total cost of the project is Rs. 85,811 Lakhs. Environment Management Cost is Approximately Rs. 8,900 lakhs.

**53.7.3** During deliberations on the proposal, the EAC took note

The proposal is for grant of Environmental Clearance, under clause 7(ii) of EIA Notification, 2006 to Amrapali Opencast Coal Mine from 12 MTPA to 16.8 MTPA in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand).

Public hearing for the project of 12 MTPA capacity in an area of 1426.08 Ha was conducted on 2<sup>nd</sup> March, 2003. Appropriate action to address the issues raised in the Public Hearing have already been taken. Further during revalidation of EC under



681

Ministry's Notification dated 6<sup>th</sup> February, 2018, Public Notice was issued on 07.08.2019 in 3 newspapers in Hindi & English language.

The Mining Plan along with Mine closure Plan for Amrapali OCP was approved by the M/s CCL Board on 4<sup>th</sup> November, 2019 in the 479<sup>th</sup> Board meeting. Letter issued on 29<sup>th</sup> November, 2019

The certified compliance report for existing Environmental Clearance of submitted by Regional Office, Ranchi of MoEF&CC vide no: 103-80/05/EPE/3638 Dated: 04.12.2019. The Committee deliberated the compliance stratus and observed various non-compliance/partial compliances of EC conditions as identified by Regional Office, Chennai.

As per Regional Office Report, Ministry under section 5 of Environment (Protection) Act, 1986 had issued show cause notice dated 12<sup>th</sup> December, 2018 to the project for non-compliances/partial compliances of the Environmental Conditions contained in the EC

Further PP submitted the Compliance to Office Memorandum J11015/224/2015.-IA.II dated 15.09.2017

Sr. No.	Requirements of Office Memorandum	Compliance
1	Predicted air quality parameters are within the prescribed norms	Complied. 1. Air quality parameters are within prescribed limits of Industry Specific limits and NAAQ Standard 2009.
2	Coal transportation is through conveyor system up to the silo and then loading to railway wagons, involving no transportation through roads.	Complied. 1. A new Amrapali railway siding is under implementation for coal transportation from Amrapali OCP for which the work has been awarded to M/s RITES Ltd. After commissioning of this siding in FY 2022-23, there will be no transportation through road. 2. At present, the coal is being transported through tarpaulin-covered trucks to nearby Shivpur Railway siding on the Tori-Shivpur line, which is at a distance of 07 km from the project boundary. All precautions are being taken for mitigation of dust. 3. The coal to end consumers is being supplied by rail from Shivpur siding.
3	Coal mining is done through deployment of surface miners, replacing three dust generating operations of the conventional mining system namely drilling, blasting and crushing in one go	Complied. 1. Coal mining is done through deployment of surface miners. 2. 5 numbers of Surface miners are deployed for mining operation at Amrapali OCP.
4	Public hearing already	Complied.

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	conducted for the total mine lease area involved and no more area is required for the proposed expansion.	<ol style="list-style-type: none"> <li>1. Public hearing for the project of 12 MTPA in an area of 1426.08 Ha was conducted on 02.04.2003 at Chatra, District: Chatra, Jharkhand.</li> <li>2. Public Notice for EC Revalidation issued on 07.08.2019 in 3 newspapers in Hindi &amp; English language.</li> <li>3. No more area is required for the expansion.</li> </ol>
5	Compliance status of EC conditions monitored by the concerned Regional Office of this Ministry is found to be satisfactory.	<ol style="list-style-type: none"> <li>1. Compliance status of EC conditions submitted by Regional Office of MoEF&amp;CC vide no: 103-80/05/EPE/3638 Dated: 04.12.2019.</li> </ol>
6	Other statutory requirements like Consent to Establish/Operate, Clearance from CGWA, approval of Mining Plan and the Mine Closure Plan, Mine Closure Status Report as applicable, Forest Clearance etc are satisfactorily fulfilled.	<ol style="list-style-type: none"> <li>1. Consent to Establish of Amrapali OCP is obtained vide Ref No. 3502 dated 09.06.2003.</li> <li>2. Consent to Operate of Amrapali OCP is obtained vide: JSPCB/HO/RNC/CTO-5076029/2019/1230 Dated: 30.06.2019 valid till 30.06.2020.</li> <li>3. Mining Plan &amp; Mine Closure Plan of Amrapali OCP is approved on 04.11.2019 in the 479<sup>th</sup> Board meeting of CCL. .</li> <li>4. Total forestland within the project area is 531.64 Ha for which Stage II Forest Clearance has been obtained vide letter no. 8-48/2008-FC on 12.10.2010.</li> <li>5. The area falls in Safe category as per the categorization available on CGWA website. Online Application for "Permission to Dewater Ground Water for Mining Industry" has been submitted vide application number - 21-4/328/JH/MIN/2018 dated 29.12.2018.</li> </ol>
7	The proposed expansion can go up to a maximum of 40 % of capacity, wherein the last public hearing was conducted.	<p>Complied.</p> <p>This proposal is for one time capacity expansion from 12.0 MTPA to 16.8 MTPA (40 %) in the existing coal mining operation.</p>
8	There is no increase in area for the proposed expansion vis-à-vis the area in EC wherein last public hearing was conducted.	<p>Complied.</p> <p>There is no increase in existing project area of the mines wherein the last public hearing was conducted.</p>
9	Coal transportation is through conveyor system up to the silo and loading to the railway wagons, and not by road.	<p>Complied.</p> <ol style="list-style-type: none"> <li>1. A new Amrapali railway siding is under implementation for coal transportation from Amrapali OCP for which the work has been awarded to M/s RITES Ltd. After commissioning of this siding in FY 2022-23, there will be transportation through road.</li> </ol>



		<p>2. At present, the coal is being transported through tarpaulin-covered trucks to nearby Shivpur Railway siding on the Tori-Shivpur line, which is at a distance of 07 km from the project boundary. All precautions are being taken for mitigation of dust.</p> <p>3. The coal to end consumers is being supplied by rail from Shivpur siding.</p>
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The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with report prepared and submitted by the Consultant on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The Committee noted that the report is in compliance for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of Environmental Clearance (EC).

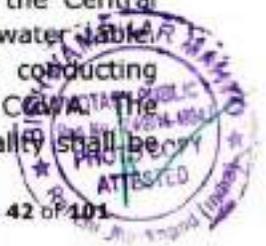
**53.7.4** The EAC, after detailed deliberation observed PP must focus on compliance of EC conditions and further **recommended** the proposal for grant of environmental clearance to Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand), under the provision of clause 7(ii) of EIA Notification, 2006 and under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions / specific conditions:-

- (i) EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.
- (ii) The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 14.4 MTPA (Peak) prior to commencement of the increased production.
- (iii) Transportation of coal from Coal Handling Plant shall be through covered trucks.
- (iv) To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
- (v) PP shall implement inpit conveyor to railway siding through silo loading in three years.
- (vi) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate



corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.

- (vii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (viii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (ix) Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (x) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (xi) The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 14.4 MTPA (Peak).
- (xii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (xiii) A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.
- (xiv) Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
- (xv) Compliance of the non-compliance/partial compliance conditions certified by Regional Office, Nagpur vide its Letter dated 4<sup>th</sup> December, 2019. The PP shall complete all non-compliance/partial compliance conditions in one year and the Action taken report shall be submitted to the Regional Office of the MoEF&CC.
- (xvi) Project proponent to plant 100,000 nos. of native trees with broad leaves along the villages and 50,000 nos of native trees along transportation route to prevent the effect of air pollution in 2 years. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.
- (xvii) The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1<sup>st</sup> May, 2018.
- (xviii) Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.
- (xix) The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2<sup>nd</sup> August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- (xx) Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be



- submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.
- (xxi) Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antsnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.
- (xxii) Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (xxiii) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.
- (xxiv) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.
- (xxv) Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.

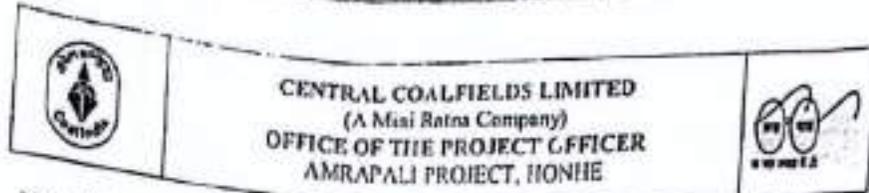
### **Agenda No.53.8**

**Lohari Opencast Coal Project of 0.2 MTPA in a total lease area of 405 ha of M/s Araanya Mines Private Limited located in villages Lohanara, Kathautia Gareyadih, Tehsil Patan, District Palamau (Jharkhand) - For Amendment in Environment Clearance**

**[Online Proposal No. IA/JH/CMIN/118659/2019; F.No. J-11015/756/200 IA.II(M)]**



686



Ref: - PO /Amrapali/ EC/Compliance/2021-22/ 2176

Date: - 11.12.2021

To,  
The Regional Officer  
Ministry of Environment Forest & Climate Change  
Regional Office, Shyamli Colony - Ranchi

The Member Secretary  
Jharkhand State Pollution Control Board  
TA Division Building, I.E.C, Dhubwa  
Ranchi.

Sub: - "Half yearly compliance on the implementation of the conditions of EC (20.16 MTPA) for the period April 2021 to September 2021 in respect of Amrapali OC.

Dear Sir,

Enclosed please find herewith "Half yearly compliance on the implementation of the conditions of Environment Clearance (20.16 MTPA) "for the period April 2021 to September 2021" in respect of Amrapali project. EC has been granted vide following:-

- (i) EC (20.16 MTPA) vide ref no:- J-11015/109/2003-IA (M) Dated 10-05-2021

This is for your kind information and necessary action please.

With Regards

Yours Sincerely

*[Signature]*  
10.12.2021  
(Project Officer)  
Amrapali OCP, CCL

Copy to:-

- 1. Regional Officer, JSPCB - Hazaribagh.
- 2. GM (Env & Forest), CCL HQ - Ranchi.

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	<p><b>CENTRAL COALFIELDS LIMITED</b> (A Mini Ratna Company) <b>OFFICE OF THE PROJECT OFFICER</b> AMRAPALI PROJECT, HONHE</p>	
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COMPLIANCE REPORT

FOR

EC (20.16 MTPA) Vide Letter No J-11015/109/2003-IA (M)

Dated 10.05.2021

**For the period April 2021 to September 2021**



**Coal India Limited**

A Maharatna Company

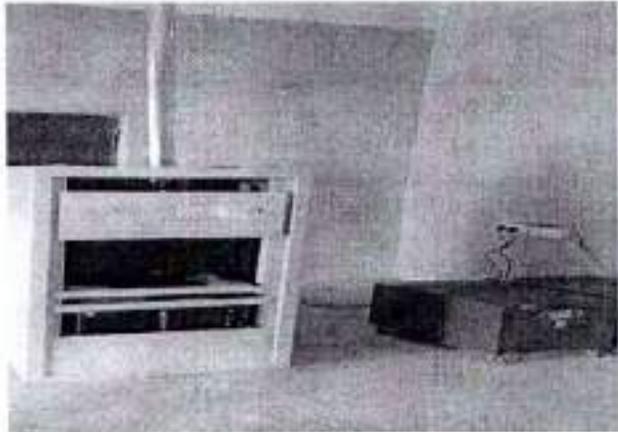
[www.coalindia.in](http://www.coalindia.in)

AMRAPALI OCP- AMRAPALI-CHANDRAGUPT AREA  
CENTRAL COALFIELDS LIMITED

(A Mini-ratna Company)

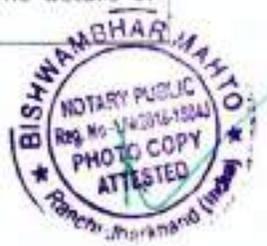


**Compliance Report of EC Vide Letter No J-11015/109/2003-IA. II (M) Dated 10.05.2021 in respect of AMRAPALI Opencast Coal Mine (20.16 MTPA) of Amrapali & Chandragupta Area, CCL in an area of 619.87 Ha.**

SN	Specific Condition	Compliance
i	The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 20.16 MTPA (Peak) prior to commencement of the increased production	Complied Online application submitted for Consent to establish of 20.16 MTPA (Peak) Capacity to Jharkhand State Pollution Control Board which is at HQ JSPCB Ranchi vide application number:-10408025 dated 10.04.2021.
ii	All the non-compliance conditions stipulated in earlier ECs shall be complied within 4 months.	<b>Being Complied</b> Observations raised by RO, MoEF&CC, Ranchi on earlier EC is being complied & compliance of some conditions is in process. Copy of compliance report attached as <b>Annexure-1</b>
iii	Further expansion shall be considered only after the completion of mitigation measures proposed by PP during EAC presentation based on recommendation of Ministry's Regional Office.	<b>Agreed.</b> All the proposed Mitigation measures during EAC presentation is being streamlined & time bound completion will be followed. Copy attached as <b>Annexure-2.</b>
iv	All the 3 continuous air quality monitoring station should be made operation within 2 months from the date of issue of this letter and the real time data so generated to be uploaded on company website. In addition, data should also be displayed digitally at entry and exist gate of mine lease area for public display.	<b>Assured to comply</b> The continuous PM10 analyzer commissioned & connected with JSPCB server by M/s Environment SA Pvt. Ltd. at Shivpur Railway Siding.    The supply order of CAAQMS system at Project Office of Amrapali OCP (Core Zone of Amrapali OCP) has been issued on 31.08.2021.

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v	<p>Adequate effectiveness of EMP should be analyzed from the offset/hike of air pollution data from continuous monitoring station and quarterly report shall be generated and submitted with 6 monthly compliance reports to RO, MoEF&amp;CC.</p>	<p><b>Assured to comply.</b>          Ambient Air Quality monitoring as well as noise level monitoring report for eight locations are prepared by CMPDI for the Qtr ending June '21 &amp; September '2021 are attached as <b>Annexure-3.</b></p> <p>The continuous PM10 analyzer commissioned &amp; connected with JSPCB server by M/s Environment SA Pvt. Ltd. at Shivpur Railway Siding.</p> <p>The supply order of CAAQMS system at Project Office of Amrapali OCP (Core Zone of Amrapali OCP) has been issued on 31.08.2021.</p>
vi	<p>The PP shall complete all non-compliance/ partial compliance in one year and the action taken report shall be submitted to Regional Office of the MOEF&amp;CC</p>	<p><b>Assured to comply</b>          All the non-compliance/ partial compliance conditions are in process &amp; will be complied in a time bound manner. Further action taken report is being attached as <b>Annexure-1.</b></p>
vii	<p>Quality of polluted water generated from the operations which include COD and acid mine drainage and metal contamination shall be monitored along with TDS, DO, TSS. The monitored data shall be uploaded on the website of the company as well as displayed at the site in public domain.</p>	<p><b>Being complied</b>          Monitoring of Effluent is being done &amp; report prepared by CMPDI for the Qtr ending June '21 &amp; September'2021 are attached as <b>Annexure-3.</b></p>
viii	<p>PP shall submit a third party assessment of EC Compliance shall be undertaken once in three years through agency like ICFRI/ NEERI/IIT or any other expert agency identified by the Ministry to Ministry's Regional Office.</p>	<p><b>Assured to comply</b>          As directed, a third party assessment shall be carried out for Amrapali OCP undertaken once in three years through experts agency recognized by MoEF&amp;CC.</p>
ix	<p>Continuous Monitoring at Occupational safety and health hazards and the Corrective action need to be ensured.</p>	<p><b>Being Complied</b>          Continuous monitoring of occupational safety and other health hazards is being undertaken. Initial Medical Examination (IME) &amp; Periodic Medical Examination (PME) of workers is being carried out. The details of IME/PME is given below:</p>



Year	IME departmental	IME Contractual	PME
2015	122	210	11
2016	15	47	21
2017	21	126	21
2018	11	384	26
2019	07	192	78
2020	03	131	82
2021	62	101	84

Persons of nearby villages shall be given training on livelihood and skill development to make them employable.

X

**Being complied**  
 The training on livelihood and skill development is regularly been undertaken in CCL & Amrapali area for making nearby villagers more employable. Skill development activities undertaken exclusively at Amrapali OCP are given below-

1. Amrapali project has procured 100 sewing machines for distribution to the Panchayats.
2. Inauguration of 'Sewing Training Center' under Amrapali Project, District Chatra under CSR initiative.

Further, skill development training like automobile repairing, food processing, motor winding, driving, electrician, tailoring, computers etc will be conducted under CER at an approximate cost of Rs 50 Lakhs in coming years.

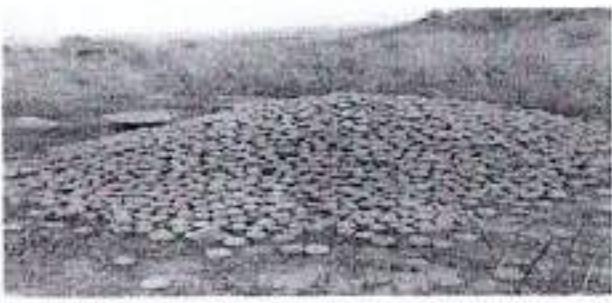
PAPs were selected for CETI (Mining and Sirdar training) and BTTI (electrician and welder training). Details are as under-

Name of training	No. of PAPs
CETI (Mining and Sirdar training)	10
BTTI (electrician and welder training)	36



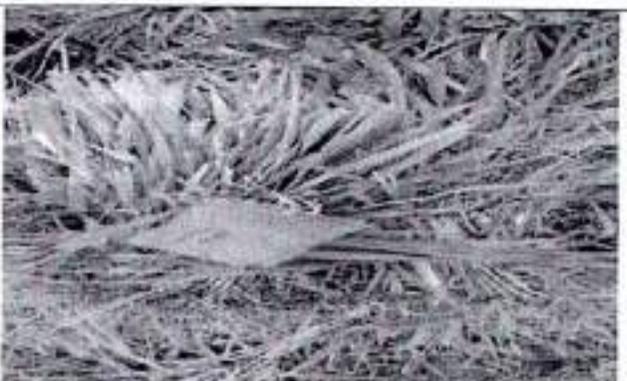
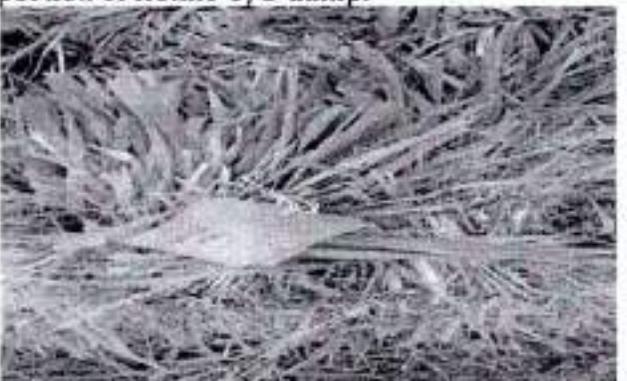
		
<p>XI</p>	<p>PP to plant 100,000 nos. of Sal trees only and develop nursery of 5 ha sal trees for free distribution in nearby areas.</p>	<p>Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021.</p> <ul style="list-style-type: none"> <li>• In Monsoon 2021, Plantation work in 23 Ha Backfilled area of 57500 plants completed by State Forest Department.</li> <li>• About 4000 saplings of multi species planted/distributed during Vriksharopan abhiyan 2021 for development of Green Belt in and around the mine site.</li> <li>• Approx 2600 species of drought hardy nature have been planted in 2020 at Binglat O/B dump.</li> <li>• Around 25134 plants have been planted for raising of Green Belt / Block plantation.</li> </ul>
<p>Xii</p>	<p>Mining shall be carried out only by surface miners for the project (as proposed) and silo loading till railway siding through in-pit conveyor should be installed to avoid road.</p>	<p>The company through agency carrying out mining operation deployed Surface Miner which is mining coal in eco-friendly manner. The work for Amrapali CHP &amp; Silo has been awarded to M/s Larsen and Turbo Limited on 31.12.2020. <b>Annexure:-4</b></p>
<p>Xiii</p>	<p>Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India &amp; Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to</p>	<p><b>Agreed.</b> Continuous development of green belt, regressing &amp; vegetation is being practiced every year in Monsoon departmentally and by State Forest department on backfilled area or available locations. Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021. Grass matting using Guinea grass, Charabadam and Johnson grass have been done on the barren portion of Honhe O/B dump in 2020.</p>



	<p>the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.</p>	 <p>Seed Balls have been spread over Slope of O/B Dump for vegetation &amp; for growth of fodder, flora, fauna in Monsoon 2020.</p> 
<p>Xiv</p>	<p>PP should opt specific mitigative measures for the straightening of Dudhmatia stream Regular monitoring of the flow rate of Dudhmatia stream shall be carried out and record maintain</p>	<p>Assured to comply.</p> <ol style="list-style-type: none"> <li>1. Construction of 1 no check dam at Dhudhmatia nallah near Binglat OB dump is completed.</li> <li>2. Construction of 4 Nos of Check Dam at Anrapali Mine has been completed at D/S of Dhudhmatia nallah.</li> <li>3. Proposal for stabilization of slope along Dudhmatiya stream using Jute netting, Guard wall with drains (along stream length 1500 m) is under tendering process.</li> <li>4. Regular Monitoring of the flow rate of Dudhmatia stream will be carried out and record will be maintained once its diversion completed.</li> </ol>
<p>Xv</p>	<p>PP should ensure that coal transportation from Anrapali Railway Siding through belt conveyor (within two years) from the grant of EC</p>	<ol style="list-style-type: none"> <li>1. The work for Anrapali CHP &amp; Silo has been awarded to M/s Larsen and Turbo Limited on 31.12.2020. <b>Annexure :-4</b></li> <li>2. The project is under construction phase and shall be completed in the stipulated timeline.</li> <li>3. The work for development of railway siding has been started in the non-forest land and application is under process for obtaining Forestry clearance.</li> </ol>

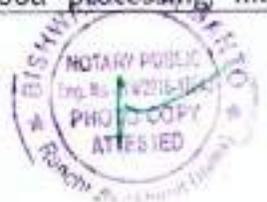
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		 <p>In Monsoon 2020, Seed ball plantation has been done for raising of Green belt in Binglat OB dump and for top soil preservation at stockyard near Honhe. Work is completed at Binglat OB dump area</p>
<p>XIX</p>	<p>Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India &amp; Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.</p>	<p><b>Agreed.</b> Continuous development of green belt, regressing &amp; vegetation is being practiced every year in Monsoon departmentally and by State Forest department on backfilled area or available locations.</p> <p>Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021.</p> <p>Grass matting using Guinea grass, Charabadam and Johnson grass have been done on the barren portion of Honhe O/B dump.</p>  <p>In Monsoon 2020, Seed ball plantation has been done for raising of Green belt in Binglat OB dump and for top soil preservation at stockyard near Honhe. Work is completed at Binglat OB dump area</p>

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xx	Commitment made during public consultation process shall be adhere to. The proposed amount earmarked for CER activities shall be considered as part of Environment Management Plan, which shall be accomplished within period of 5 years"	<p><b>Agreed.</b> All the Commitment made during public consultation process is being streamlined &amp; time bound completion will be followed.</p> <p>A fund provision of Rs. 4.29 Crore has been allocated for Corporate Environment Responsibility.</p>
xxi	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.	<p><b>Assured to comply</b></p> <p>The company through agency carrying out mining operation deployed Surface Miner which is mining coal in eco-friendly manner. Further electronic detonator is being used in mining process.</p> <p>As mine is now advancing towards habitation (Kumrang kala and Kumarang khurd) application for blasting permission keeping danger zone of 500 made on 22.12.2020 to DGMS.</p>
xxii	In addition, the project proponent shall develop greenbelt outside the plant premises such as avenue plantation, plantation in vacant areas, social forestry etc.	<p><b>Assured to comply</b></p> <p>2000 native species has been planted as greenbelt near Honhe OB dump in 7.5 m width &amp; 1200 native species have been planted by State forest Department in 2015-16 along the NBCC road.</p>
xxiii	PP shall pay to farmers of agricultural land if there is any loss found by concerned District Commissioner as per extent rules or norms.	<p><b>Agreed</b></p> <p>If any such loss being found by Concerned District Commissioner.</p>
xxiv	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	<p><b>Being complied</b></p> <p>The training on livelihood and skill development is regularly been undertaken in CCL &amp; Amrapali area for making nearby villagers more employable. Skill development activities undertaken exclusively at Amrapali OCP are given below-</p> <ol style="list-style-type: none"> <li>1. Amrapali project has procured 100 sewing machines for distribution to the Panchayats.</li> <li>2. Inauguration of 'Sewing Training Center' under Amrapali Project, District Chatra under CSR initiative.</li> </ol> <p>Further, skill development training like automobile repairing, food processing, motor</p>



winding, driving, electrician, tailoring, computers etc will be conducted under CER at an approximate cost of Rs 50 Lakhs in coming years.

1. PAPs were selected for CETI (Mining and Sirdar training) and BTTI (electrician and welder training). Details are as under-

Name of training	No. of PAPs
CETI (Mining and Sirdar training)	10
BTTI (electrician and welder training)	36



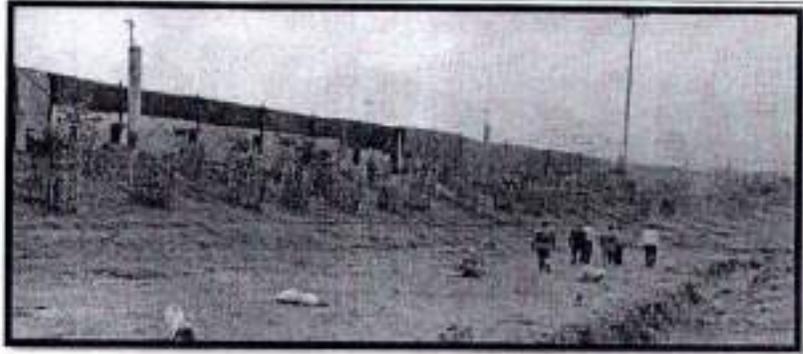
Standard EC Conditions		
SN	Specific Condition	Compliance
<b>(a) Statutory Compliance</b>		
i	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project	<b>Complied</b> The total project area of Amrapali OCP is 619.87 Ha out of which the total Forest land is 531.64 Ha that has been granted stage-II vide no FL-08/48/2008/FC Dated 12.10.2010.
ii	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	<b>Being Complied</b> This condition is not applicable for Amrapali OCP.
iii	The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).	<b>Being Complied</b> An action plan for conservation of endangered flora and fauna has been prepared and submitted to State Forest Department (DFO (Chatra)) & PCCF (WL) for approval on 20.01.2021. This action plan shall be implemented as per the recommendation and consultation of State Forest and Wildlife Department.
iv	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.	<b>Complied</b> The project has a valid consent issued by Jharkhand State Pollution Control Board till 31.12.2021 for 14.4 MTPA. Online application submitted for Consent to establish of 20.16 MTPA (Peak) Capacity to Jharkhand State Pollution Control Board which is at HQ, JSPCB Ranchi vide application number:- 10408025 dated 10.04.2021. Online application for CTO (20.16 MTPA) has been applied on vide application no: 10829845 dated 20.07.2021.
v	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	<b>Being Complied</b> Amrapali OCP falls in Chatra District, which falls in "Safe" category as per CGWA categorization. No Objection Certificate (NOC) For Ground Water Abstraction of 4,220 m <sup>3</sup> /day for Amrapali OCP has been issued on 05.02.2021, which includes water sprinkling, green belt development and other activities for Amrapali OCP.



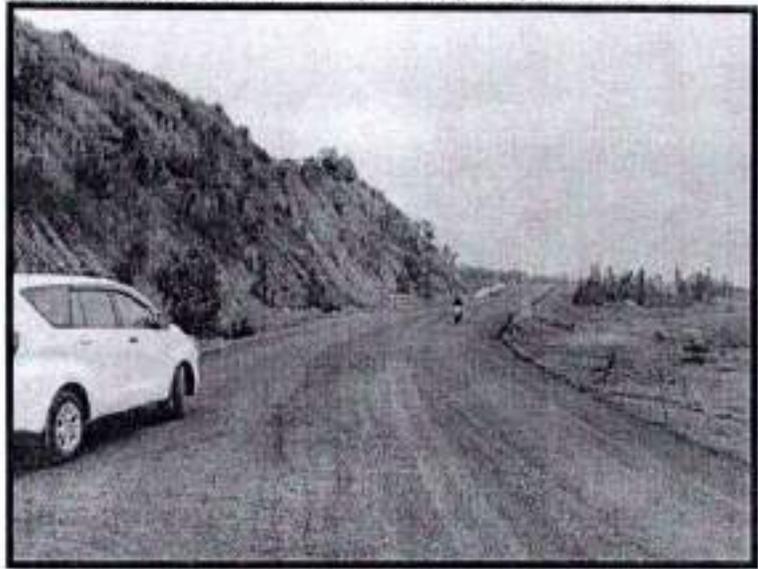


	<p>the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.</p>
<p>ii</p>	<p><b>Being Complied</b>          At present the ambient air quality is being monitored at Eight numbers of stations every fortnight in the core zone as well as in the buffer zone for ensuring the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time Monitoring of Heavy Metals are also being carried out once every six month. The monitoring report is also being submitted to Regional Office of MoEF&amp;CC, JSPCB &amp; CPCB along with six monthly compliance report &amp; Environmental Statement. The monitoring report is enclosed herewith as <b>Annexure-3</b>.</p>
<p>iii</p>	<p><b>Being Complied</b>          Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM25) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.</p> <p>At present the following mitigation measures are being undertaken for control of dust &amp; other fugitive emissions:          At present the following mitigation measures are being undertaken for control of dust &amp; other fugitive emissions:</p> <ol style="list-style-type: none"> <li>The work for fixed water sprinkling system over a length of 01 Km at haul road is under process.</li> <li>Fixed sprinkling system on Coal transportation road at Honhe Village is under tendering process.</li> <li>Deployment of Road Sweeping Machines on CT Road</li> <li>8 number of Fog cannon under Procurement at HQ.</li> <li>Work awarded for Wind Screen Barrier 1 Km at Ursu Village &amp; proposal for 2 Km both side at Honhe Village is under tendering process at HQ.</li> <li>05 number of departmental water sprinklers of 28 KL capacity having an average working hours of 4 Hr/day are deployed for water sprinkling. In addition, there are 13 contractual water sprinklers of 12 KL &amp; 20 KL capacities are deployed with an average of 9 trips/tanker/day.</li> </ol>  <ol style="list-style-type: none"> <li>Fixed sprinklers (for 1.2 km) at estimated cost of Rs. 90 lakh is in process near weigh bridge 10 to Shivpur road.</li> </ol>

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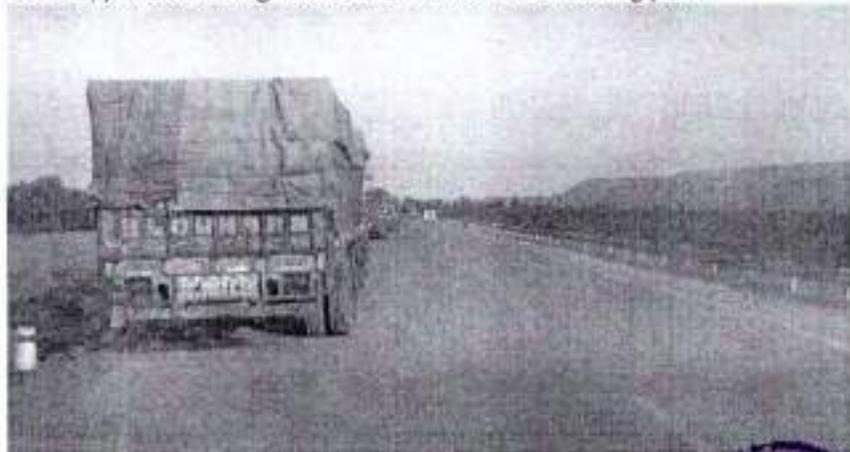
- h. Mist type water tanker at an estimated cost of Rs. 70 lakh is in process at HQ.
- i. PCC roads have been constructed and are being maintained for ensuring coal transportation without any coal spillage on the road.



iv The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.

**Being Complied**

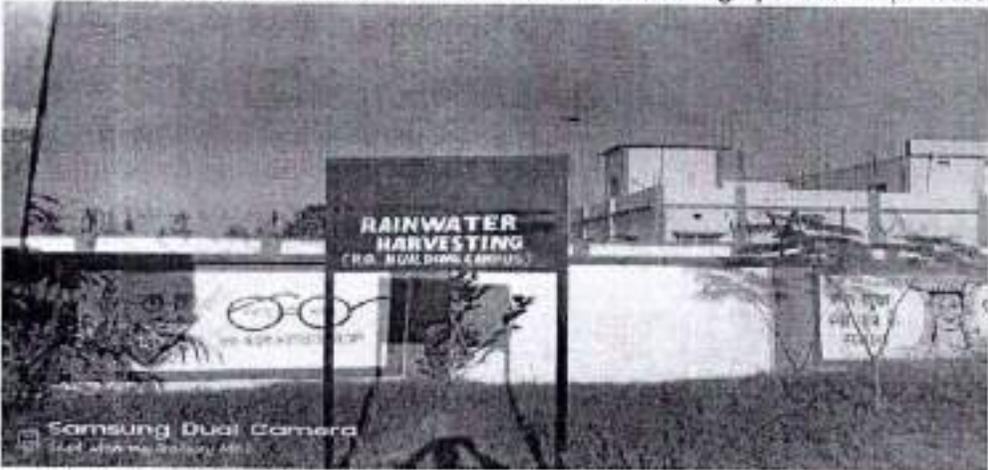
The transportation of coal is being carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan.

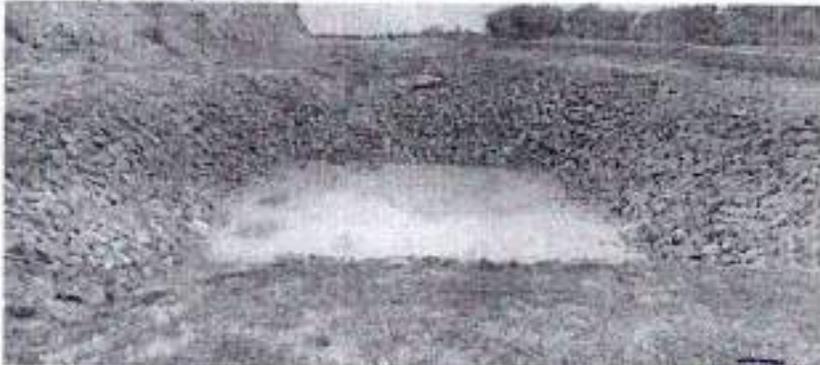




<b>(c) Water quality monitoring and preservation</b>	
<p>(i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.</p>	<p><b>Complied</b>          Mine water of Amrapali OCP is being monitored fortnightly in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.          The latest monitoring reports of Amrapali OCP are enclosed as <b>Annexure-3</b>.</p>
<p>(ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.</p>	<p><b>Being Complied</b>          The monitoring data is being displayed at CCL website with six monthly compliance reports &amp; Environment Statement in Form-V.          Environmental parameters are now being displayed at notice board of Amrapali Project Office.</p>
<p>(iii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.</p>	<p><b>Being Complied</b>          Monitoring report of Piezometer for winter session (Jan), Pre-Monsoon &amp; Monsoon session has been sent to the CGWB Patna vide ref no. PO/Amrapali OC/2019-20/2158 dated 16.01.2020 &amp; vide ref no. PO/Amrapali OC/2020-21/740 Dated:-29-06-2020 &amp; vide ref no. PO/Amrapali OC/2020-21/1378 dated 10.09.2020 respectively. The latest Monitoring report of piezometer submitted on date 31.01.2021 vide ref no:- PO/Amrapali/EC Compliance/2020-21/2962 (A).          The latest report of ground water level &amp; quality is also enclosed as <b>Annexure-3</b>.          For installation of additional 05 numbers of Piezometer is re-tendering process.</p> 
<p>(iv) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.</p>	<p><b>Being Complied</b>          The monitoring of water quality upstream and downstream of Honhe Nailah is being carried out quarterly.          The latest monitoring reports of Amrapali OCP are enclosed as <b>Annexure-3</b>.</p>



<p>(v)</p>	<p>Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.</p>	<p><b>Complied.</b> No ground water is being utilized for mining operations. Several rainwater harvesting measures has been undertaken for Amrapali OCP.</p> <p><b>Rainwater Harvesting:-</b></p> <ul style="list-style-type: none"> <li>A. Work Completed for installation &amp; Construction of rainwater harvesting system at PO office and Executive Hostel of Amrapali Project</li> <li>B. Work completed for installation of Rainwater Harvesting system at VTC. Work awarded &amp; is in process for PIT Canteen, Rest Shelter, First Aid Centre, IRB Camp Prefab Hostel, Unit Store under Amrapali Project, A-C Area. On 19.08.2021 Vide Ref. No. GM(A-C)/SO(C)/Award of Work/2021-2022/34.</li> <li>C. Work has been awarded to Bikash kumar with cost of Rs.12,76,097.78(Rupees Twelve Lakh Seventy Six Thousand Ninety Seven &amp; Seventy Eight Paise). The work has been started near Rest Shelter.</li> <li>D. Proposal for 15 numbers of Rain water Harvesting System is in process.</li> </ul> 
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<p>(vi)</p>	<p>Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps &amp; OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ponds so constructed shall be regularly de-silted particularly before onset of</p>	<p><b>Complied</b> The catch drains &amp; garland drains have been developed along with siltation ponds to ensure that sediment flow in surface water is prevented. The details of drains are given below:</p> <ul style="list-style-type: none"> <li>a) Construction of Catch drain of 3 Km length &amp; 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump.</li> <li>b) Construction of Catch drain of 2 Km length &amp; 02 nos of Siltation pond around Honhe OB Dump is completed.</li> </ul>  <p>c) Construction of catch drain and siltation pond at different corners of</p>
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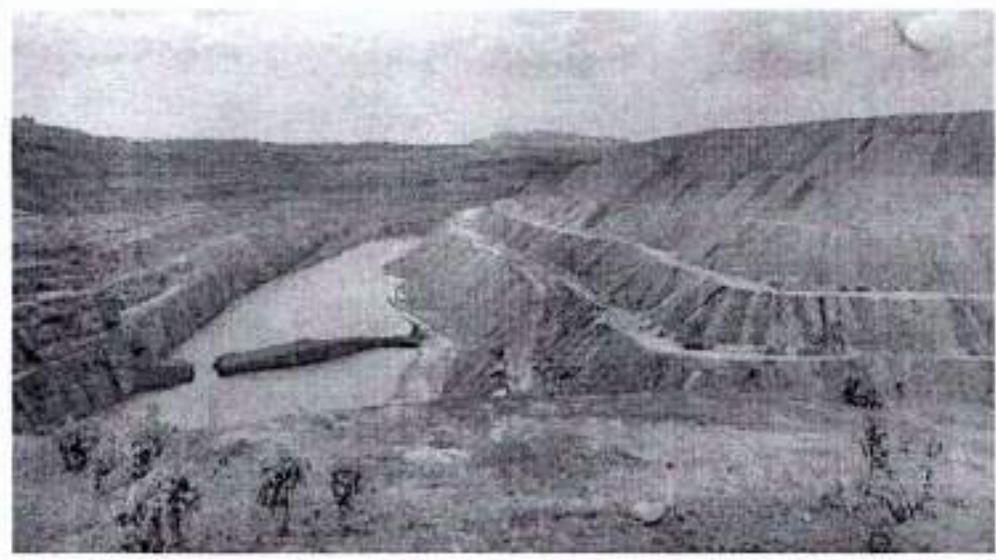

  
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monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/ habitation/water bodies

d) Construction of quarry boulder retaining wall between Top Soil & OB dump along with catch drain & Siltation pond on Topsoil.



Sump capacity is also maintained to ensure to provide adequate retention period to allow proper settling of silt material.



Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021.

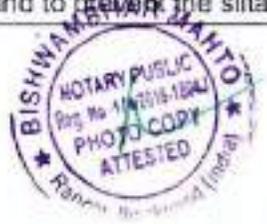
- Grass matting using Guinea grass, Charabadam and Johnson grass have been done on the barren portion of Honhe O/B dump.
- Plantation can only be done in Non Coal bearing area, Over Burden (OB) dump and backfilled area and along the Haul roads & putca roads in mine premises.

(vii) Adequate groundwater recharge measures shall be taken up for augmentation of groundwater. The project authorities shall meet water requirement of nearby

The following activities have been undertaken for ensuring ground water recharge for augmentation of ground water:

**Check dams:-**

a. Construction of 1 no check dam at Dhudhmatia Nallah near Binglat OB dump has been completed for the ground water recharge and to prevent the siltation.



village(s) after due treatment conforming to the specific requirement (standards).



b. Construction of 4 Nos of Check Dam at Amrapali Mine has been completed at D/S of Dhudhmatia nallah, Parsna Village, near Godwar village mandir & Godwar village.



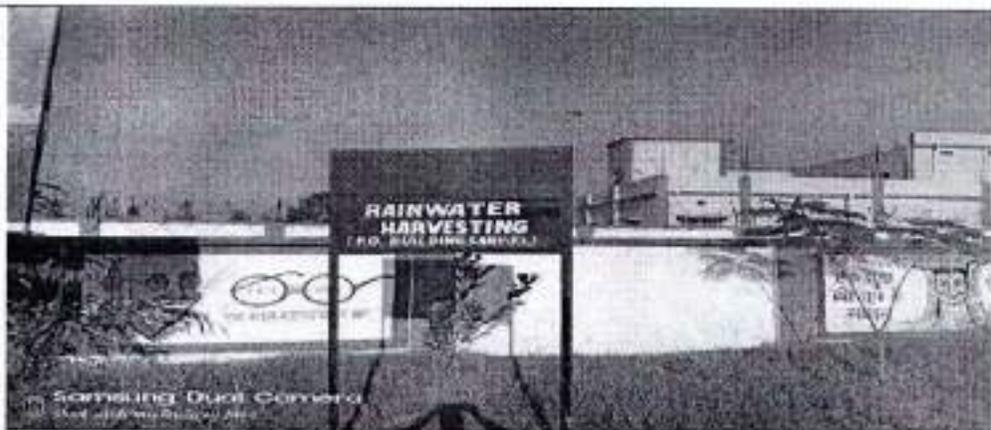
c. The work of making of Siltation Pond at Y-More near gate no.03 (Ursu checkpoint) completed.

d.)Construction of 1 number of Checkdam at Honhe completed.

**Rainwater Harvesting:-**

- a. Work Completed for installation & Construction of rainwater harvesting system at PO office and Executive Hostel of Amrapali Project
- b. Work completed for installation of Rainwater Harvesting system at VTC. Work awarded & is in process for PIT Canteen, Rest Shelter, First Aid Centre, IRB Camp Prefab Hostel, Unit Store under Amrapali Project, A-C Area. On 19.08.2021Vide Ref. No. GM(A-C)/SO(C)/Award of Work/2021-2022/34.
- c. Work has been awarded to Bikash kumar with cost of Rs.12,76,097.78(Rupees Twelve Lakh Seventy Six Thousand Ninety Seven & Seventy Eight Paisa). The work has been started near Rest Shelter.
- d. Proposal for 15 numbers of Rain water Harvesting System is in process.





**Ponds-**

- a) 01 no of Pond has been constructed at Honhe.
- b) 01 no of pond has been constructed at Birhortola(Koyed).



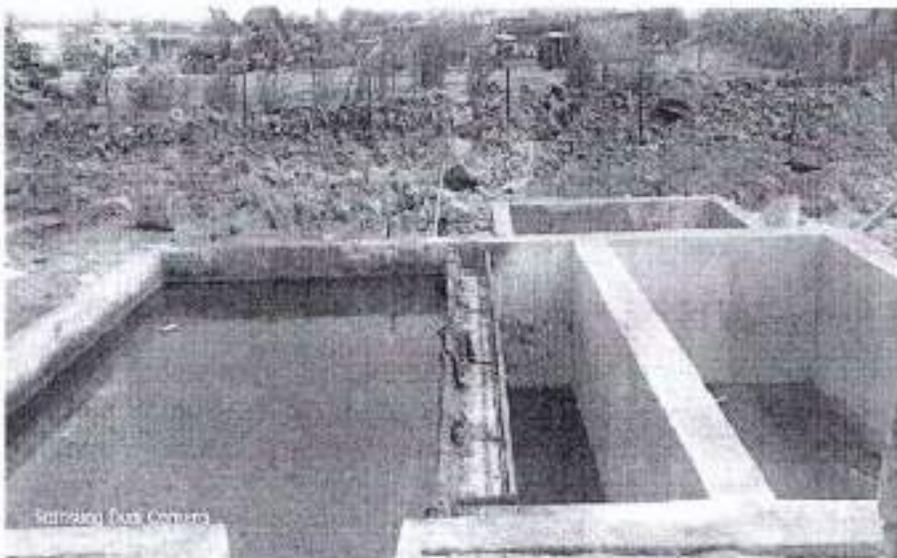
- c) Construction of 1 No of pond at Ursu more is completed.

Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.

**Being complied**

Industrial wastewater generated is being properly collected and treated. The monitoring report is enclosed herewith as **Annexure-3**.

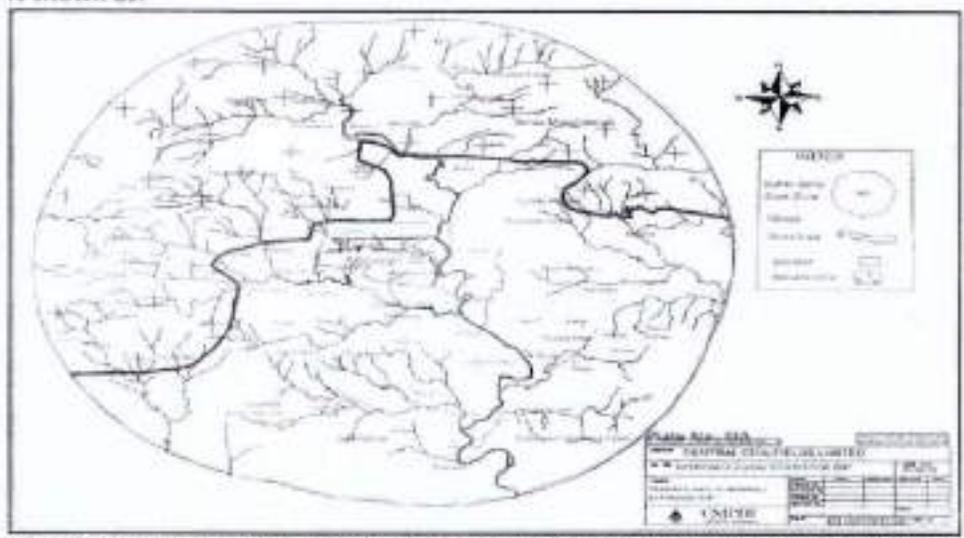
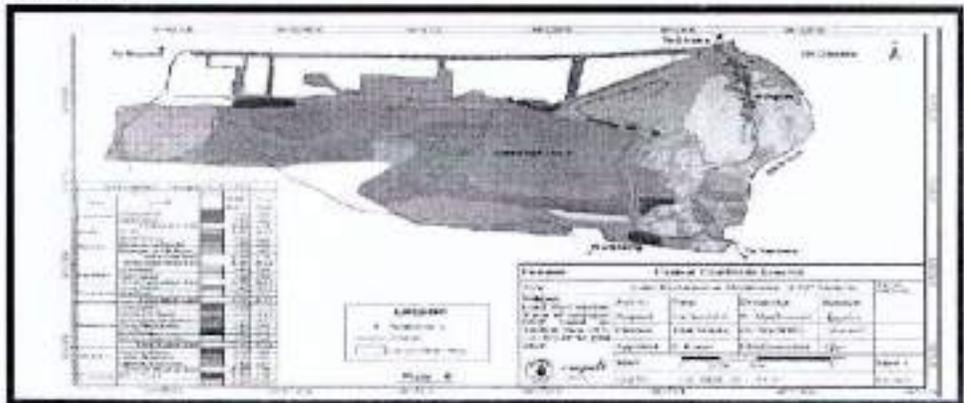
Automated wheel Washing system with Effluent Treatment Plant has been commissioned & operational at the workshop of Outsourcing agency to mitigate fugitive emission.



Provision of ETP has been made in the workshop. Work awarded to NBCC for Construction of Workshop along with ETP for the expansion project vide No.NBCC/ED(CPG)/2020/500 Dated:13.11.2020.

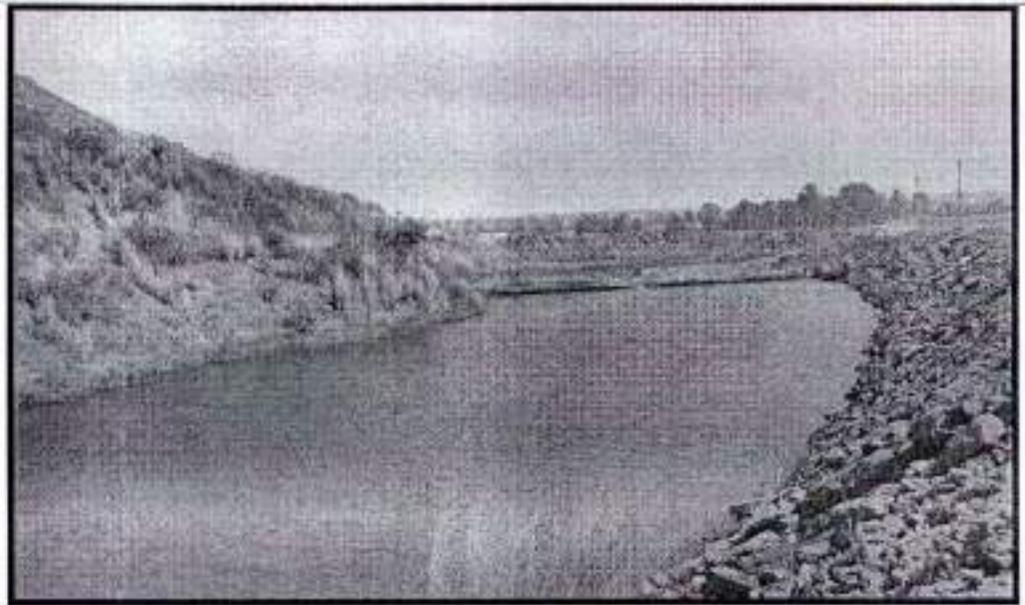
(viii)



<p>(ix)</p>	<p>The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.</p>	<p><b>Being complied</b>                  The water pumped out from mine is being utilized for industrial purpose viz. watering the mine area, roads, green belt development etc.                   The drains are being desilted once in a year Pre-monsoon for proper channeling of water into sedimentation ponds.</p>
<p>(x)</p>	<p>The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/ pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural watercourses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority.                   The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.</p>	<p><b>Being complied</b>                  The surface drainage map, water table contour map &amp; watershed map of Amrapali OCP is shown as:-</p>  <p>The diversion of nallah is proposed as per the approved Mining Plan &amp;EIA/EMP report. Due approval before diversion of nallah shall be taken and it will be submitted to MoEF&amp;CC.</p>  <p>Barki River marks the eastern boundary of the property with a safe distance of about 100 mtrs.</p>



208

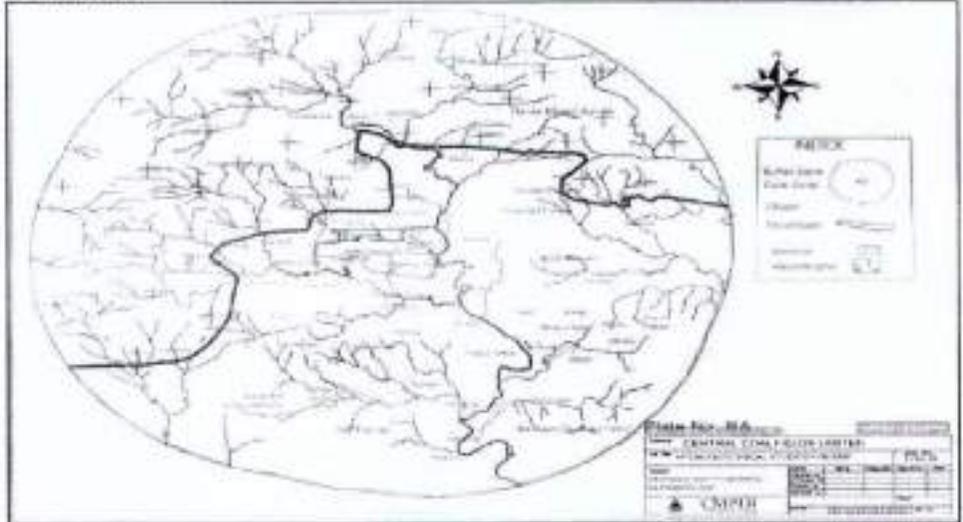


(xi)

The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coalmine up to a distance of 5 km. A riverine /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

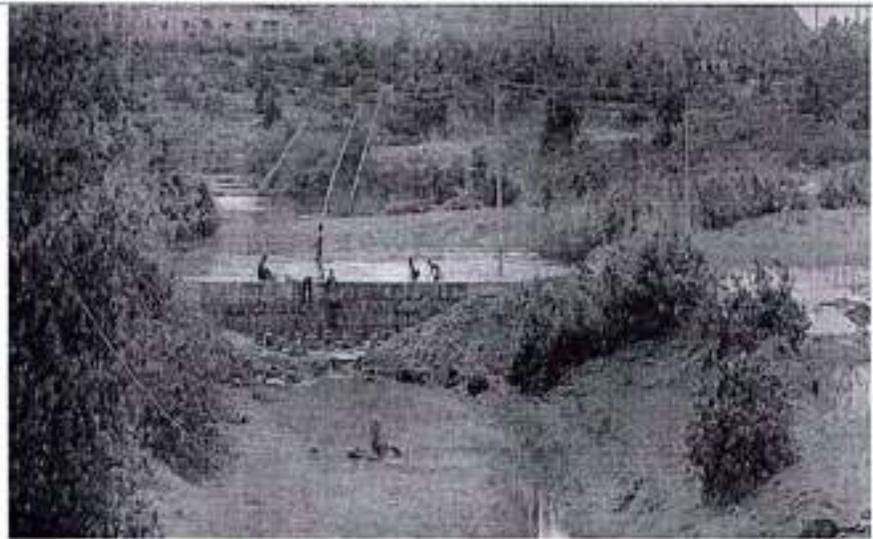
**Being complied**

Impact study of mining on surface water has been carried out as part of EIA/EMP study. The surface drainage map, water table contour map & watershed map of Amrapali OCP is shown as:-



Several conservation measures including construction of Ponds, check dams & siltation tanks has been undertaken as per the measures proposed in the EIA/EMP report.





**(d) Noise and Vibration monitoring and prevention**

(i) Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipment (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

**Being complied**  
 Suitable mitigation measures will be taken to prevent adverse impacts of high noise level on the workmen. This includes provision of earmuffs, sound proof operator cabins, sufficient warnings before blasting, and improved blasting techniques, development of plantation around industrial area and avenue plantation.  
 The details of PPE issued to workers are given below for kind consideration.

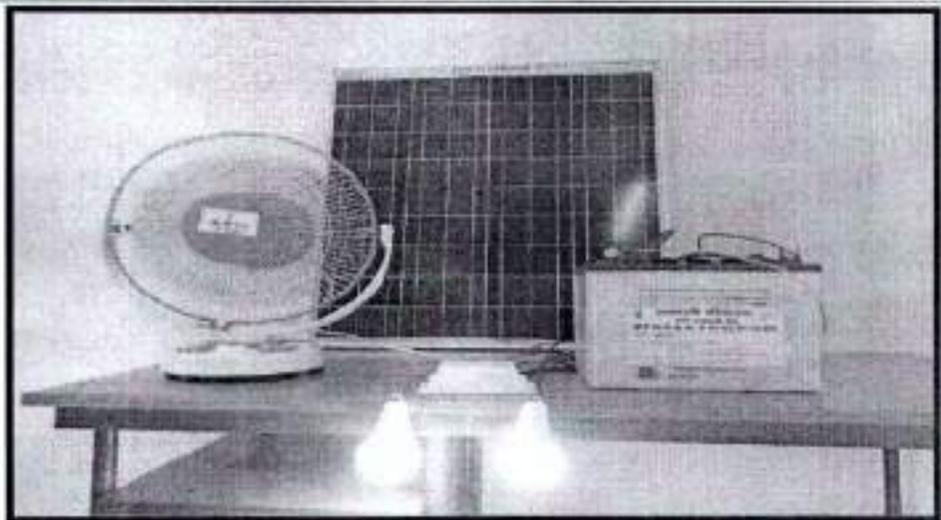
S. no	Item	Year 2020	Year 2021
1	Mining Shoe	917	154
2	Helmet	722	64
3	Gum boot	210	30
4	Masks	8006	2105
5	First aid kit	3	39
6	Florescent jacket	1060	69
7	Ear muffs	87	Nil
8	goggles	376	Nil

(ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, Fly rocks, noise and air blast etc., as per the guidelines prescribed by the

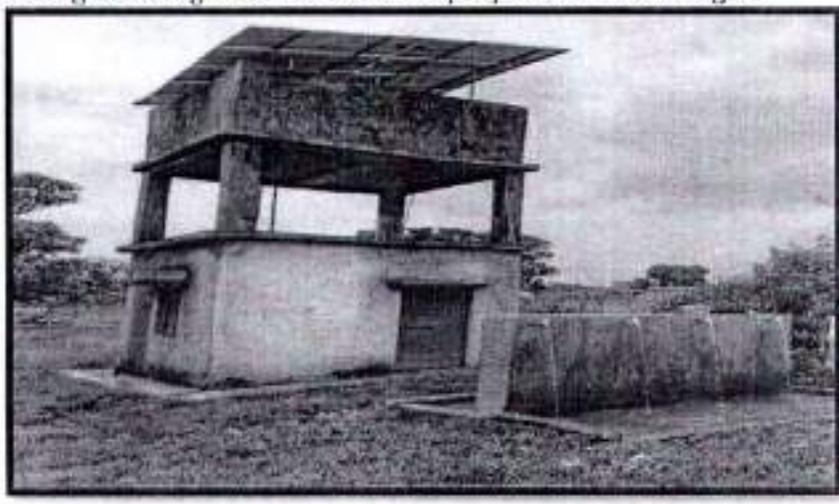
**Being complied**  
 Controlled blasting techniques are adopted. Blasting is done only in daylight hours. Proper blast design is prepared to control ground vibrations and arrest flyrocks and boulders; Blasting is done by use of NONEL Technology & Electronic detonator for reducing Noise Pollution and Vibration.



	DGMS.	
(iii)	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.	<b>Complied</b> Noise level monitoring is being done fortnightly at Eight locations of Amrapali OCP. The values are within the prescribed standards. The monitoring report is enclosed as <b>Annexure-3</b> for quick reference.
<b>(e) Mining Plan</b>		
(i)	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there under as applicable.	<b>Being complied.</b> Mining is being carried out as per the provisions of Mines Act 1952 and subordinate legislations there under.
(ii)	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS)	<b>Being Complied.</b> Mining is being done in abidance to the approved mining plan and under permission of Directorate General Mines Safety (DGMS).
(iii)	No mining shall be carried out in forest land without obtaining forestry clearance as per Forest (Conservation) Act, 1980.	<b>Being Complied.</b> Forest land is 531.64 Ha that has been granted stage-II vide no FL-08/48/2008/FC Dated 12.10.2010.
	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	<b>Being Complied.</b> Efforts are being made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy. Work completed for procurement, installation & commissioning of 1,500 numbers of household solar lights units for project affected villagers under Ursu, Binglat, Honhe, Kumrang Kalan & Kumrang Khurd.
		



Construction of Solar Power Operated deep bore well with recharge Pit: Work Completed for construction of 13 nos of deep well boring each with solar power operated submersible pumps set, pump house, recharge pit etc. for providing drinking water in different project affected villages.



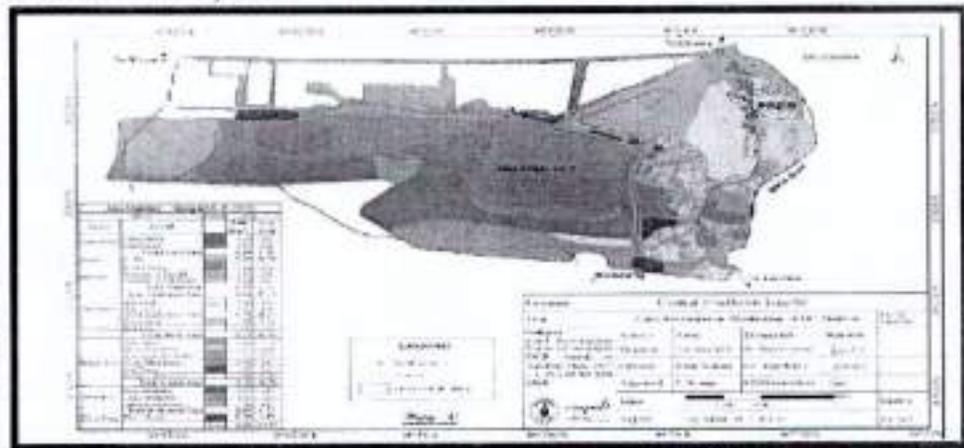
**(f) Land Reclamation**

(i)

Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).

**Complied.**

Digital Survey of entire core zone using Satellite Remote Sensing survey is being carried out once in three years.

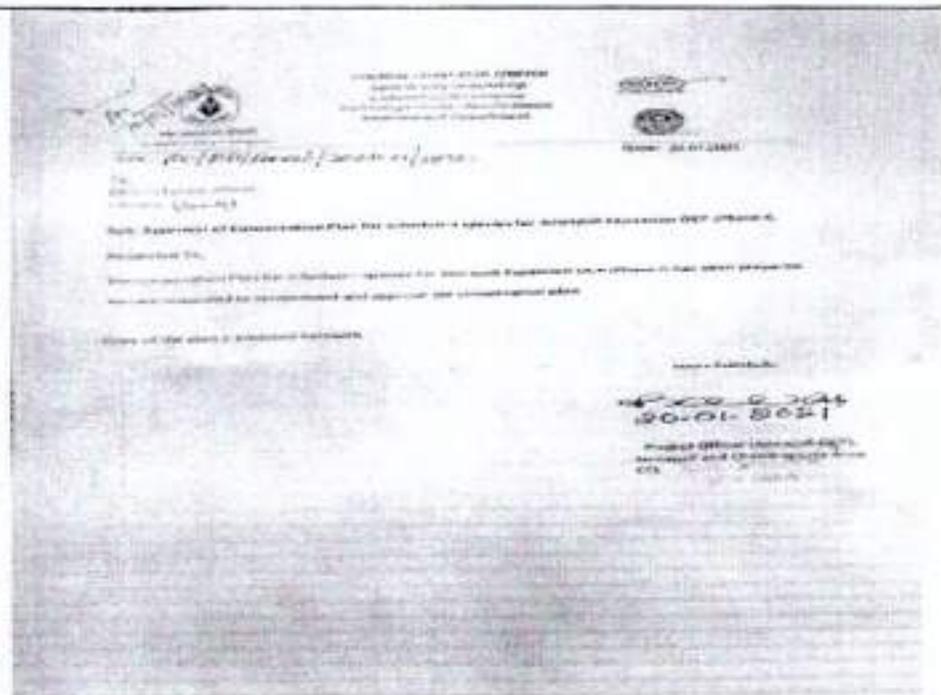


**BISHWAMBHAR MAHTO**  
 NOTARY PUBLIC  
 Reg. No. 17/2018-1804  
 PHOTOCOPY  
 ATTESTED  
 Raipur, Chhattisgarh (India)

<p>(ii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive topsoil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.</p>	<p><b>Assured to comply.</b>          The final mine void depth shall be as per the approved mining plan.          The remaining area shall be backfilled and bio-reclaimed as per the approved mine closure plan.          A separate account has been opened in Bank of Baroda Vide account no: 00170100019666.          Internal dumping/ Technical reclamation to the mined out area of Amrapali OCP has been done from 2017-18 to 2021-22 till September 2021.</p> <p>In 2017-18, 26 Ha area was technically reclaimed, in 2018-19, 5.30 Ha of area was technically reclaimed, in 2019-20, 34.7 Ha in 2020-21 &amp; 50 Ha of area has been backfilled in 2021-22 upto September 2021.</p> 
<p>(iii) The entire excavated area, backfilling, external OS dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land- use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.</p>	<p><b>Assured to comply.</b>          Project proponent assures that the land use of the project shall be in conformity with land use pattern as submitted in the approved mining plan &amp; EIA/EMP report.          The progressive compliance status vis-a-vis the post mining land use shall be submitted.</p> <p>Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021.</p> <ul style="list-style-type: none"> <li>In Monsoon 2021, Plantation work in 23 Ha Backfilled area of 57500 plants completed by State Forest Department.</li> </ul>
<p>(iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of</p>	<p><b>Assured to comply</b>          At present there is no fly ash dumping in the project. However if the fly ash shall be used for dumping the provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3<sup>rd</sup> November, 2009 as amended from time to time shall be followed.</p> 

	mines.	
(v)	<p>Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The topsoil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.</p>	<p><b>Being complied</b> Internal dumping/ Technical reclamation to the mined out area of Amrapali OCP has been done from 2017-18 to 2021-22 till September 2021.</p> <p>In 2017-18, 26 Ha area was technically reclaimed, in 2018-19, 5.30 Ha of area was technically reclaimed, in 2019-20, 34.7 Ha in 2020-21 &amp; 50 Ha of area has been backfilled in 2021-22 upto September 2021.</p> <p>The final mine void depth shall be as per the approved mining plan. The remaining area shall be backfilled and bio-reclaimed as per the approved mine closure plan. A separate account has been opened in Bank of Baroda Vide account no: 00170100019666.</p> <p>Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021.</p> <ul style="list-style-type: none"> <li>In Monsoon 2021, Plantation work in 23 Ha Backfilled area of 57500 plants completed by State Forest Department.</li> </ul>
(vi)	<p>The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.</p>	<p><b>Complied</b> At present, there is no grazing land is involved in the project area of 619.87 Ha.</p>
<b>(g) Green Belt</b>		
(i)	<p>The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the</p>	<p><b>Being Complied</b> An action plan for conservation of endangered flora and fauna has been prepared and submitted to State Forest Department (DFO (Chatra)) &amp; PCCF (WL) for approval on 20.01.2021.</p>



<p>study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.</p>	 <p>This action plan shall be implemented as per the recommendation and consultation of State Forest and Wildlife Department.</p>
<p>(ii) 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. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.</p>	<p><b>Being Complied</b>          2000 native species has been planted as greenbelt near Honhe OB dump in 7.5 m width &amp; 1200 native species have been planted by State forest Department in 2015-16 along the NBCC road.</p>
<p><b>(h) Public hearing and Human health issues</b></p>	
<p>(i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry &amp; it's RO on six-monthly basis.</p>	<p><b>Being Complied</b>          Adequate illumination is being ensured at all mine locations (as per DGMS standards) and monitored weekly.</p>



Date - 15.04.21 Time - 8:30 P.M.

Sr. No.	Location	Illumination (Lux)			
		Existing		Standard	
		H	V	H	V
(1)	Inlet area above of houses Bhamburda Road Area	18.2	26.2	15	25
		13.9	26.2	15	25
		15.1	24.5	15	25
		16.2	25.0	15	25
		19.2	30.2	15	25
D/S Gate Area		17.2	24.1	15	25
		15.2	24.9	15	25
		14.8	25.2	15	25
(2)	Hard Road (Footpath)		28		10
			12.2		15
			8.2		10
			2.1		10
(3)	D/S Dump yard	9.8	14.9	15	15
		12.5	14.1	15	15
		10.8	21.2	15	15
		17.2	18.2	15	15
(4)	C/S Gate Area No. 06 (Landing Area)	16.2	21.1	15	15
		12.8	14.9	15	15
		11.5	12.5	15	15
(5)	C/S Gate Area No. 22 (Underpass Area)	11.2	14.2	15	15
		18.2	23.2	15	15
		12.8	2.2	15	15
(6)	Road shoulder & bit rd Station		26.8		20
			35.8		20
			45.6		20
			72.2		20

Signature: \_\_\_\_\_ Date: 15/4/21

(ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

**Being Complied**

Continuous monitoring of occupational safety and other health hazards is being undertaken. Initial Medical Examination (IME) & Periodic Medical Examination (PME) of workers is being carried out. The details of IME/PME is given below:

Year	IME departmental	IME Contractual	PME
2015	122	210	11
2016	15	47	21
2017	21	126	21
2018	11	384	26
2019	07	192	78
2020	03	131	82
2021	64	101	84

(iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.

**Being Complied**

All personnel's working in core zone have been provided with protective respiratory devices and also be provided with adequate training and information on safety and health aspects.

SN	Item	Year 2020	Year 2021
1	Mining shoe	917	154
2	Helmet	722	84



3	Gum boot	210	30
4	Masks	8006	2105
5	First aid kit	3	39
6	Florescent jacket	1060	69
7	Ear muffs	87	Nil
8	goggles	376	Nil

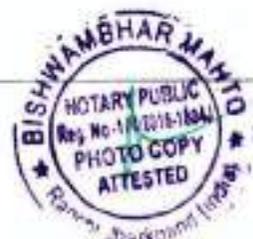
The refresher VTC Training undertaken in past years are as given below:

SN	Training	Year 2020	Year 2019	Year 2018
1	Refresher VTC training	63	46	13

The training program for the workers (Departmental & Contractual) held is given below:

SN	Training	Year 2020	Year 2021
1	VTC	222	156
2	Refresher	63	39
3	Basic VT	02	50

(iv)	<p><b>Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&amp;R policy of the company/State Government/Central Government, as applicable.</b></p> <p><b>Complied</b> Issues raised during Public Hearing have been complied &amp; some other conditions are in process. <b>Annexure:-5</b></p> <p>R &amp; R plan has been prepared as per the details submitted in EIA/EMP report and is being followed to provide all benefits as per the CIL approved R &amp; R Policy. Land compensation for 35.19 acres has been paid till date.</p>
(v)	<p><b>The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.</b></p> <p><b>Being Complied</b> The mitigation proposed in Ministry's OM No.Z-11013/5712014-1A.11 (M) dated 29th October, 2014 is being followed.</p>



**(i) Corporate Environment Responsibility**

(i)	<p>The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.</p>	<p><b>Complied</b> A fund provision of Rs. 4.29 Crore has been allocated for Corporate Environment Responsibility. The activity wise expenditure is prepared and given below for information and appraisal.</p>																								
		<table border="1"> <thead> <tr> <th>SN</th> <th>Area of Focus</th> <th>Fund allocation in Rs. Lakhs</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Infrastructure Development (Construction of Road, Electricity, Drinking Water etc.)</td> <td>150</td> </tr> <tr> <td>2</td> <td>Skill Development &amp; Employment</td> <td>80</td> </tr> <tr> <td>3</td> <td>Medical Camp, Health &amp; Hygiene</td> <td>60</td> </tr> <tr> <td>4</td> <td>Education</td> <td>60</td> </tr> <tr> <td>5</td> <td>Development of Surface water Bodies</td> <td>25</td> </tr> <tr> <td>6</td> <td>Community Plantation</td> <td>54</td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Total in Rs. Lakhs</b></td> <td style="text-align: center;"><b>429</b></td> </tr> </tbody> </table>	SN	Area of Focus	Fund allocation in Rs. Lakhs	1	Infrastructure Development (Construction of Road, Electricity, Drinking Water etc.)	150	2	Skill Development & Employment	80	3	Medical Camp, Health & Hygiene	60	4	Education	60	5	Development of Surface water Bodies	25	6	Community Plantation	54	<b>Total in Rs. Lakhs</b>		<b>429</b>
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<b>Total in Rs. Lakhs</b>		<b>429</b>																								

(ii)	<p>The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/ conditions and/or shareholders/stake holders.</p>	<p><b>Complied</b> CCL has a well laid down environmental policy duly approve by the Board of Directors. The environmental policy prescribes standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/conditions. The approved Environmental Policy is also available at CCL website at: <a href="https://www.centralcoalfields.in/sutbs/pdf/17_12_19_CorporateEnvironmentalPolicy2018.pdf">https://www.centralcoalfields.in/sutbs/pdf/17_12_19_CorporateEnvironmentalPolicy2018.pdf</a></p>
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(iii)	<p>A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.</p>	<p><b>Complied</b> Separate Environmental cell both, at project &amp; company head quarter level has been setup.</p>
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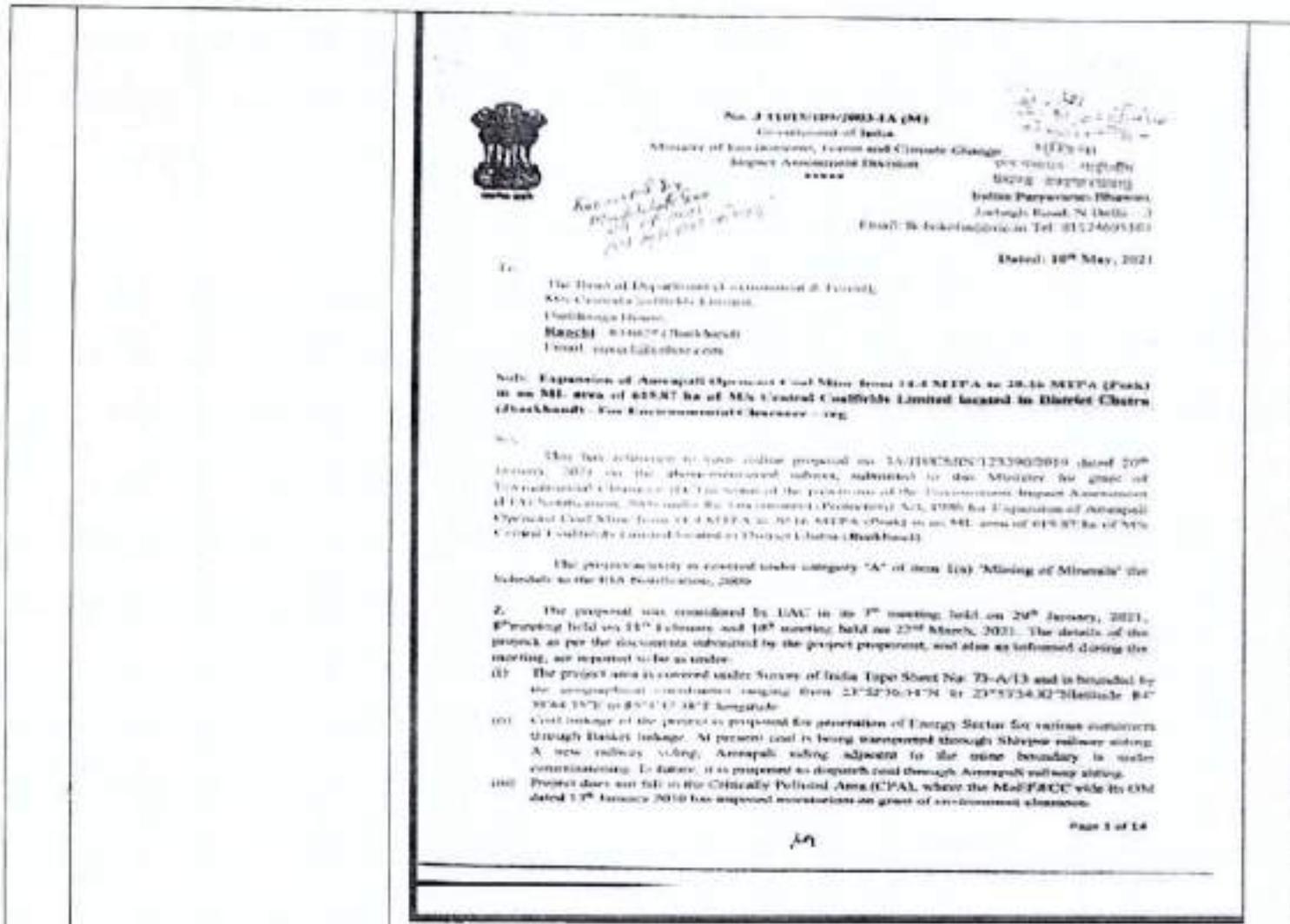
(iv)	<p>Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved</p>	<p><b>Complied</b> Total expenditure made till date on environment protection measures and year wise progress of implementation of action plan has been prepared along with action plan for implementing EMP and environmental conditions along with responsibility matrix of the company. Copy attached as <b>Annexure:- 2</b></p>
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	<p>by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.</p>	
(v)	<p>Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.</p>	<p><b>Assured to comply</b> As directed, a third party assessment shall be carried out for Amrapali DCP undertaken once in three years through experts agency recognized by MoEF&amp;CC. Self environmental audit shall also be conducted annually and report will be submitted to MoEF&amp;CC.</p>
<b>(j) Miscellaneous</b>		
(i)	<p>The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.</p>	<p><b>Complied</b> Environment clearance letter has been uploaded on CCL Web Site. The link of the same is given below: <a href="https://www.centralcoalfields.in/sutbs/envr_clrnce.php">https://www.centralcoalfields.in/sutbs/envr_clrnce.php</a>  The EC was also advertised in two local Newspapers. Copy attached as <b>Annexure:-6</b></p>
(ii)	<p>The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.</p>	<p><b>Complied</b> The copy of environmental clearance has been submitted to head of Panchayats.</p>



719



<p>(iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half yearly basis.</p>	<p><b>Complied</b>          The status of compliance is being uploaded on CCL website along with results of monitored data. The web-link is given below:  <a href="https://www.centralcoalfields.in/sutbs/six_mnthly.php">https://www.centralcoalfields.in/sutbs/six_mnthly.php</a></p>
<p>(iv) The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.</p>	<p><b>Being Complied</b>          CCL is monitoring the criteria pollutants level namely; PM10, PM2.5, SO2, NOx every fortnight. The monitoring data is being displayed at CCL website with six monthly compliance reports &amp; Environment Statement in Form-V.          The same is also being displayed at Project office of Amrapali OCP.</p>



(v)	<p>The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.</p>	<p><b>Complied</b>                  The six monthly compliance report is being submitted to the Regional office of the MoEF&amp;CC at regular interval.                  Six monthly compliance report for EC submitted to Board timely. Latest by ref no:- PO/Amrapali/EC/CTO/CTE/ Compliance/2021-22/155 (A) on 26/07/2021.</p>
(vi)	<p>The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.</p>	<p><b>Being Complied</b>                  The mitigation proposed in Ministry's OM No.Z-11013/5712014-IA.11(M) dated 29th October, 2014 is being followed.</p>
(vii)	<p>The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.</p>	<p><b>Complied</b>                  The environmental statement in Form-V is being submitted to the Jharkhand State Pollution Control Board &amp; is also being displayed on the website of the company at: <a href="https://www.centralcoalfields.in/sutbs/envr_stmnt.php">https://www.centralcoalfields.in/sutbs/envr_stmnt.php</a></p>
(viii)	<p>The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.</p>	<p><b>Complied</b>                  Amrapali OCP is operational from 07.02.2014. The progressive reports are being submitted to MoEF&amp;CC with six monthly compliance periodically.</p>
(ix)	<p>The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.</p>	<p><b>Being Complied</b>                  Project proponent is strictly adhering to the stipulations made by the Jharkhand State Pollution Control Board.</p>
(x)	<p>The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that</p>	<p><b>Being Complied</b>                  Project proponent is taking action as per the commitments and recommendations made in the EIA/EMP report/public hearing and submission made to MoEF&amp;CC.                  The updated status shall be submitted to MoEF&amp;CC every six month with compliance report.</p>



	during their presentation to the Expert Appraisal Committee.	
(xi)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.	<b>Agree to Comply</b> Project proponent assures to comply that no further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
(xii)	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	<b>Agree to Comply</b>
(xiii)	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	<b>Agree to Comply</b>
(xiv)	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	<b>Agree to Comply</b>
(xv)	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information / monitoring reports.	<b>Agree to Comply</b> Project proponent assures to extend full cooperation to the officer (s) of the Regional Office.
Xvi	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes	<b>Agree to Comply.</b>



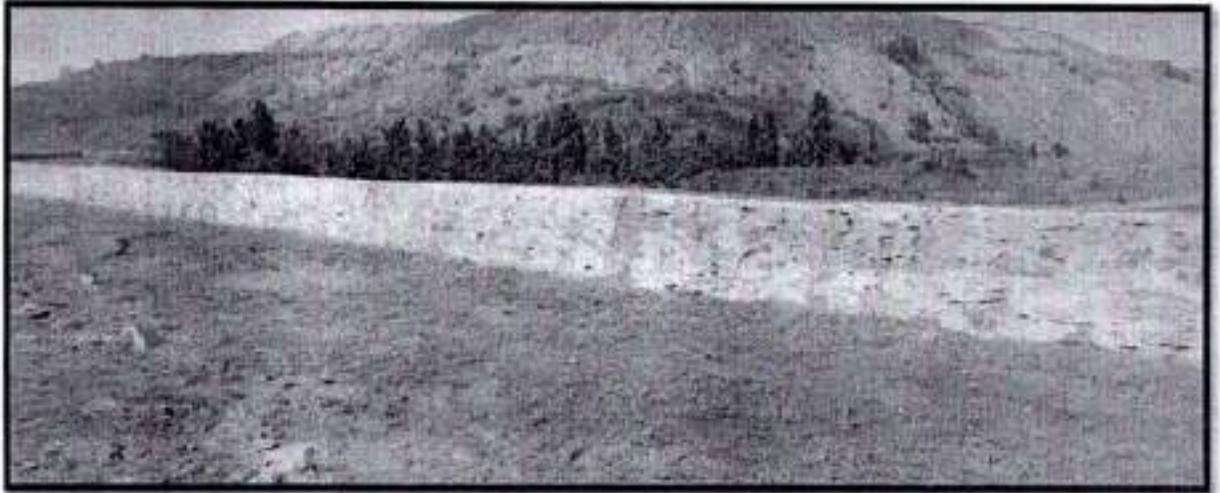
<p>(Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.</p>	
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**Project Officer  
Amrapali Project**



**PHOTOS IN RESPECT OF COMPLIANCE**

**Photo 1. Toe wall:-**



**Photo 2. Garland drain.**



**Photo 3 Retaining wall**

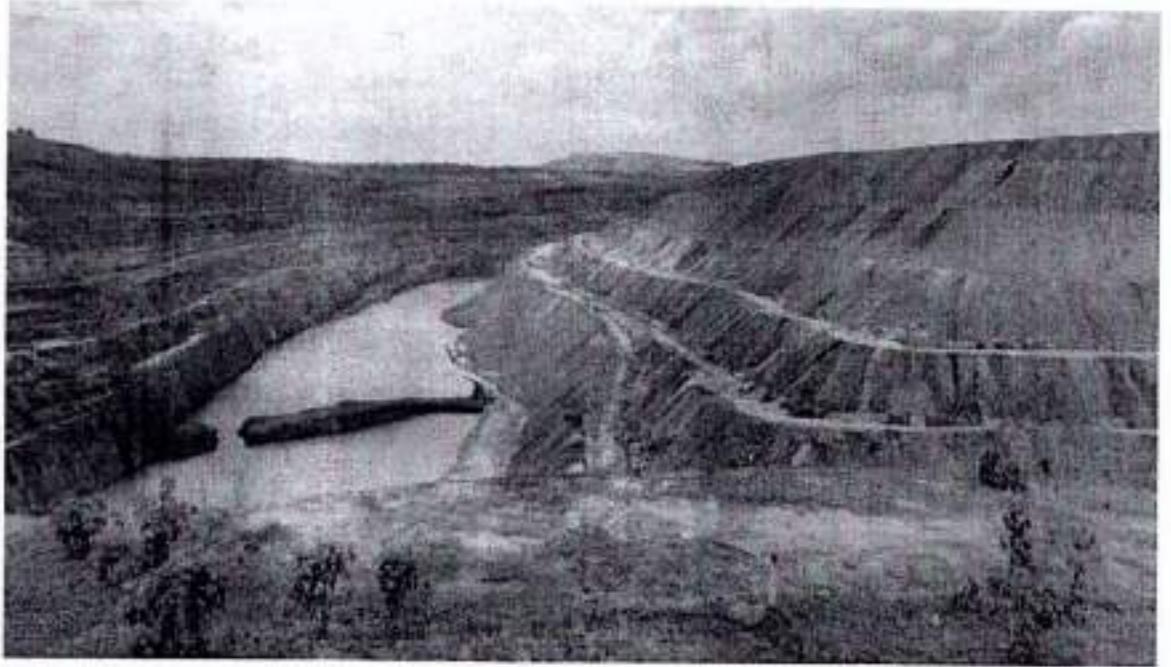


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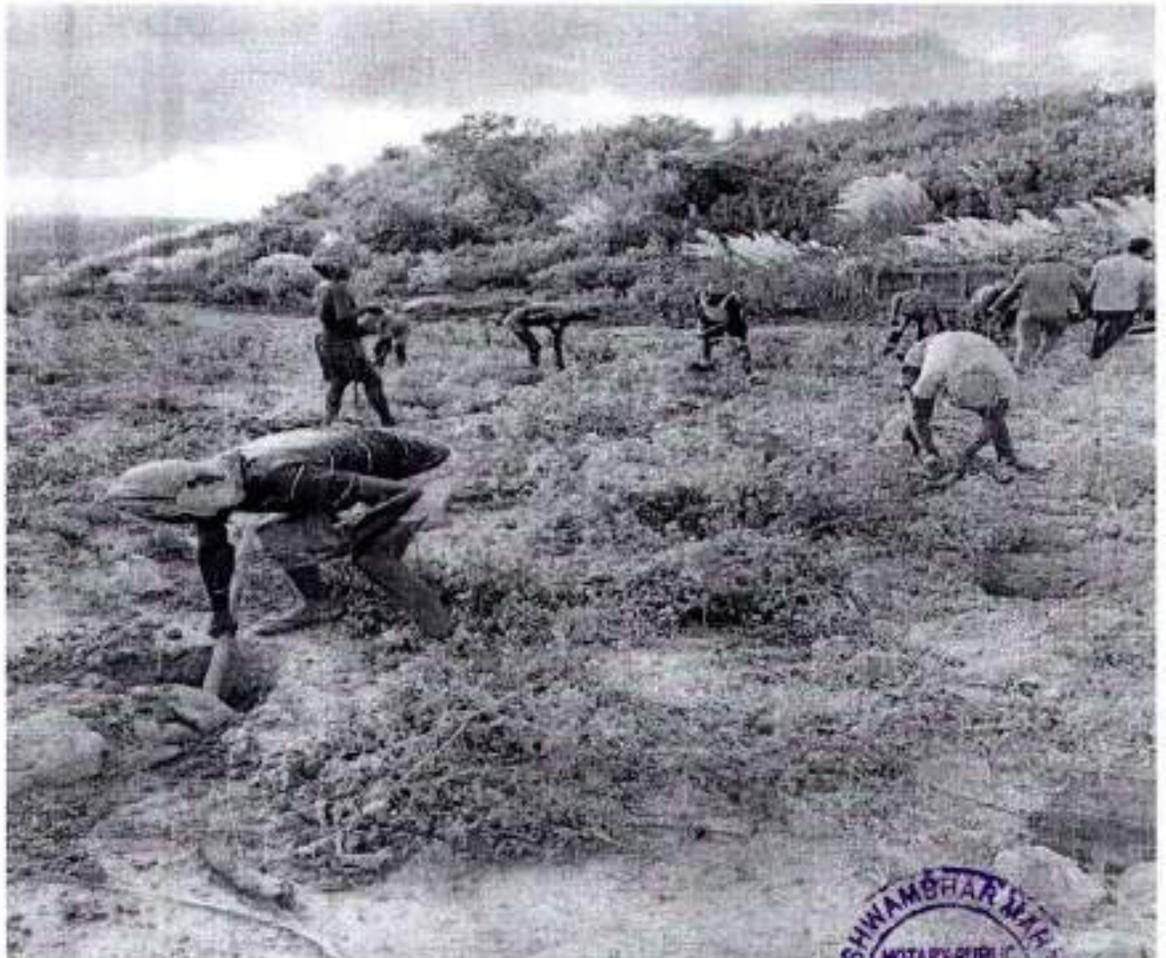
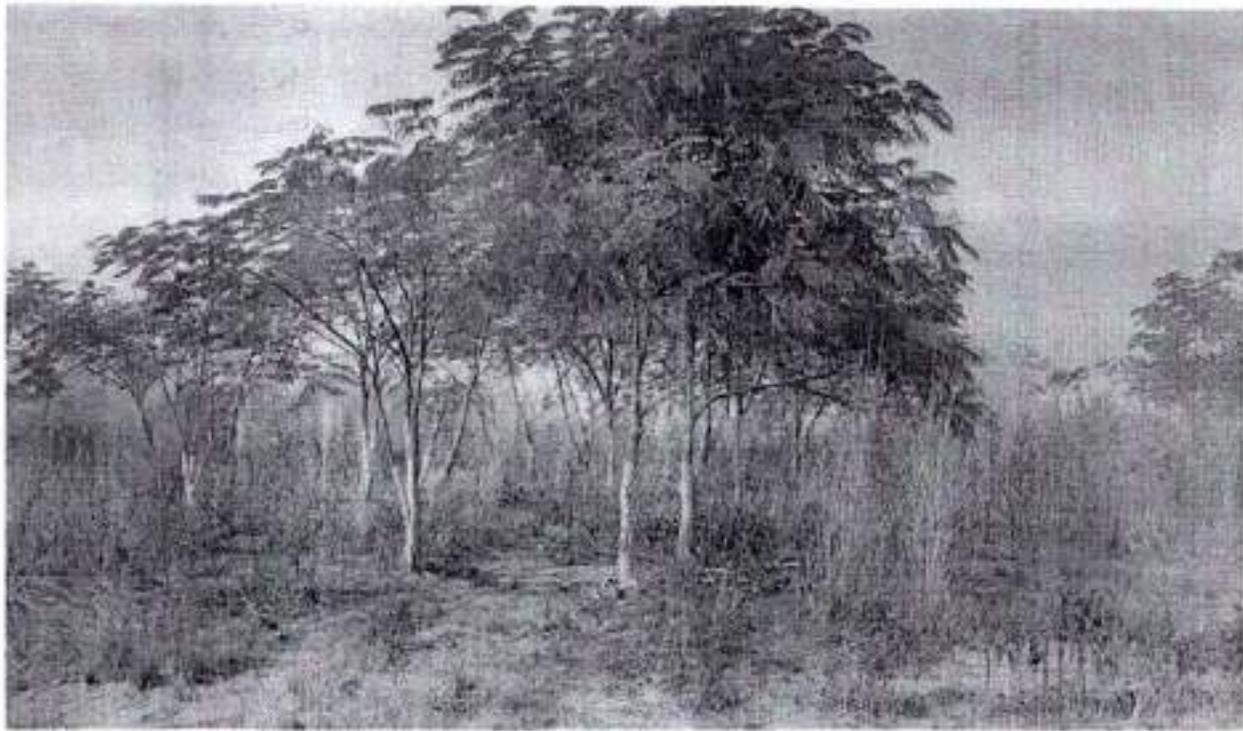
Photo 4.OB internal dumping/ technical reclamation.



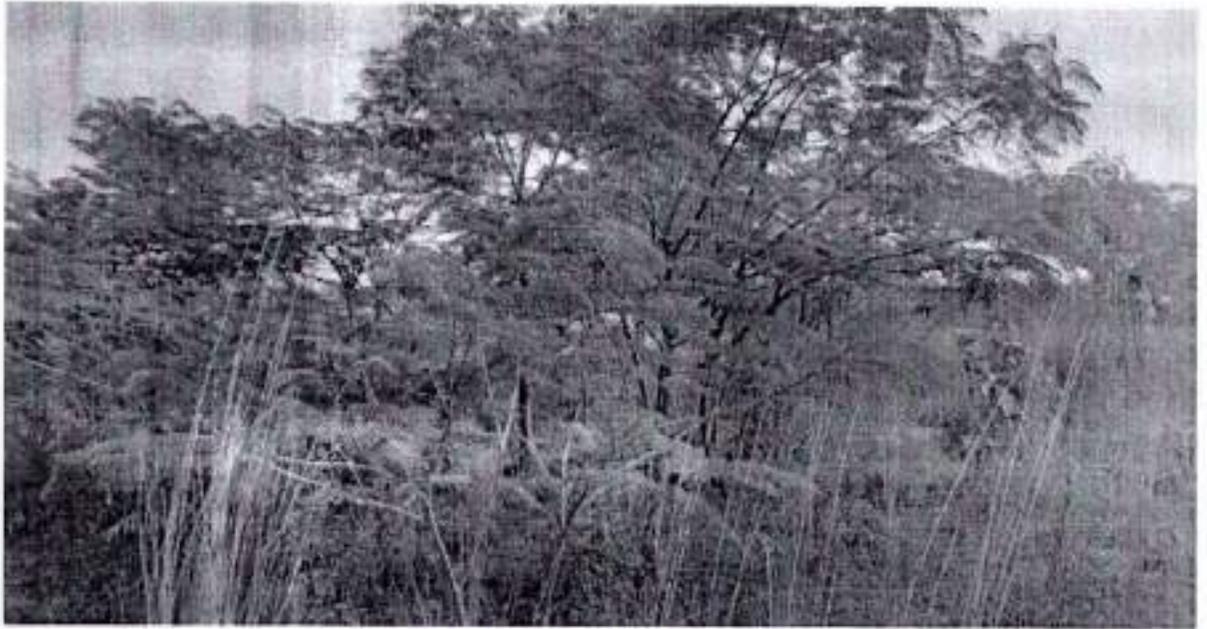
BISHWAMBHAR MAHTA  
NOTARY PUBLIC  
REG. NO. 142016-1144  
PHOTO COPY  
ATTESTED  
Ranchi, Jharkhand, India

26

Photo 5: Plantation



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ATTESTED  
Banskh. Jharkhand (India)



**Seed Ball**



**Photo 6: Catch drain & Siltation pond**



728



Siltation Pond



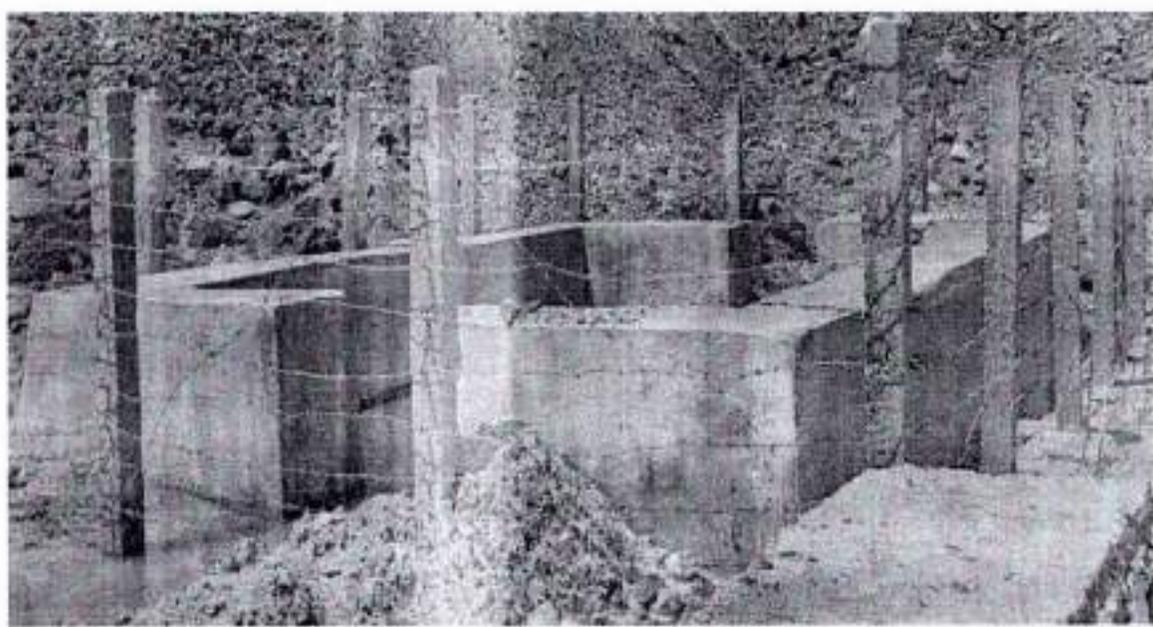
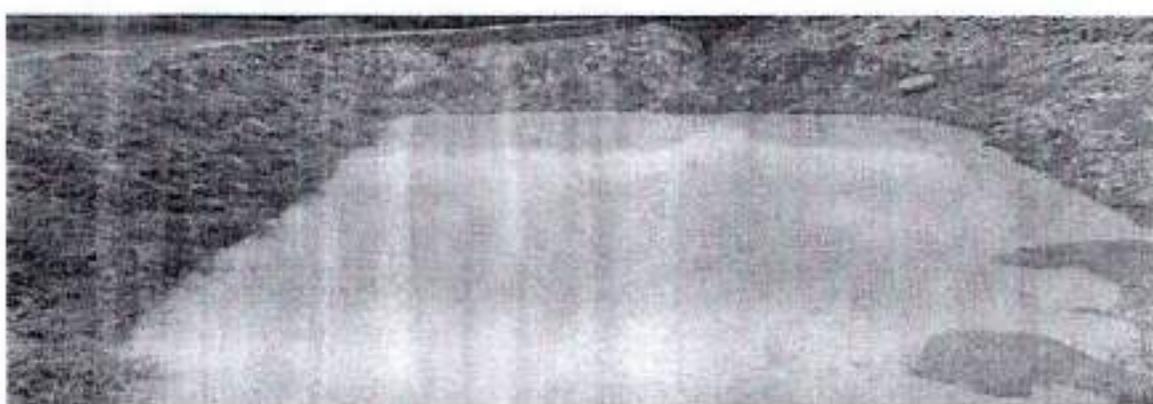
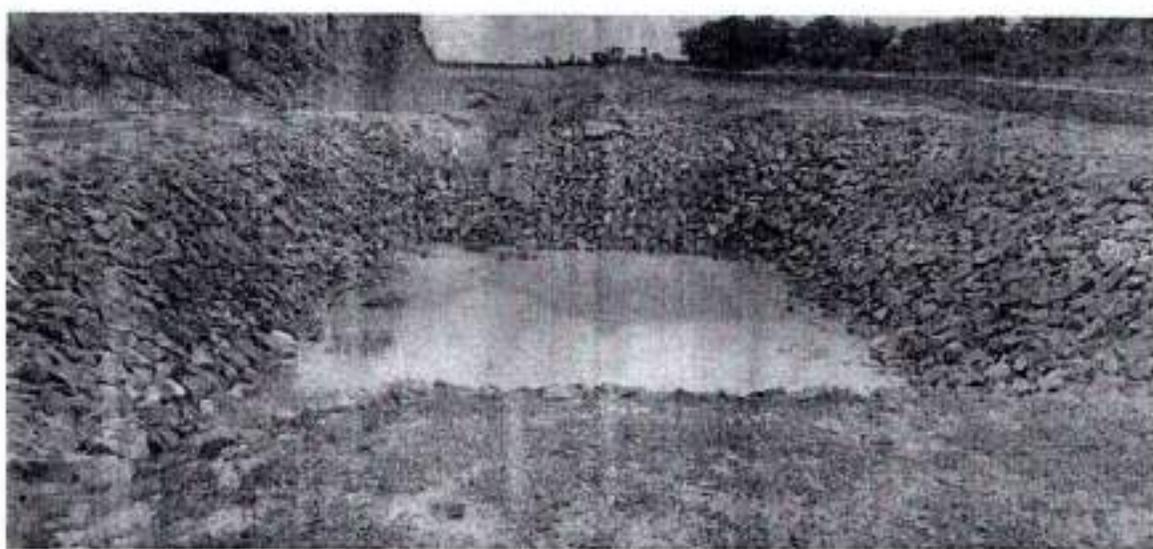
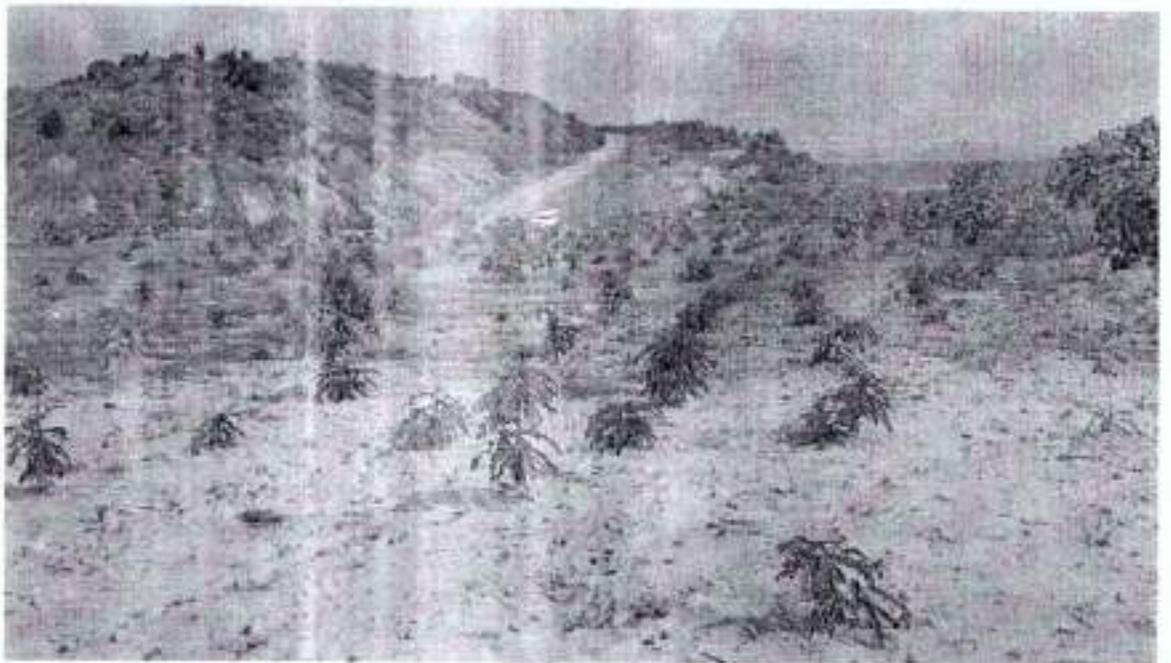
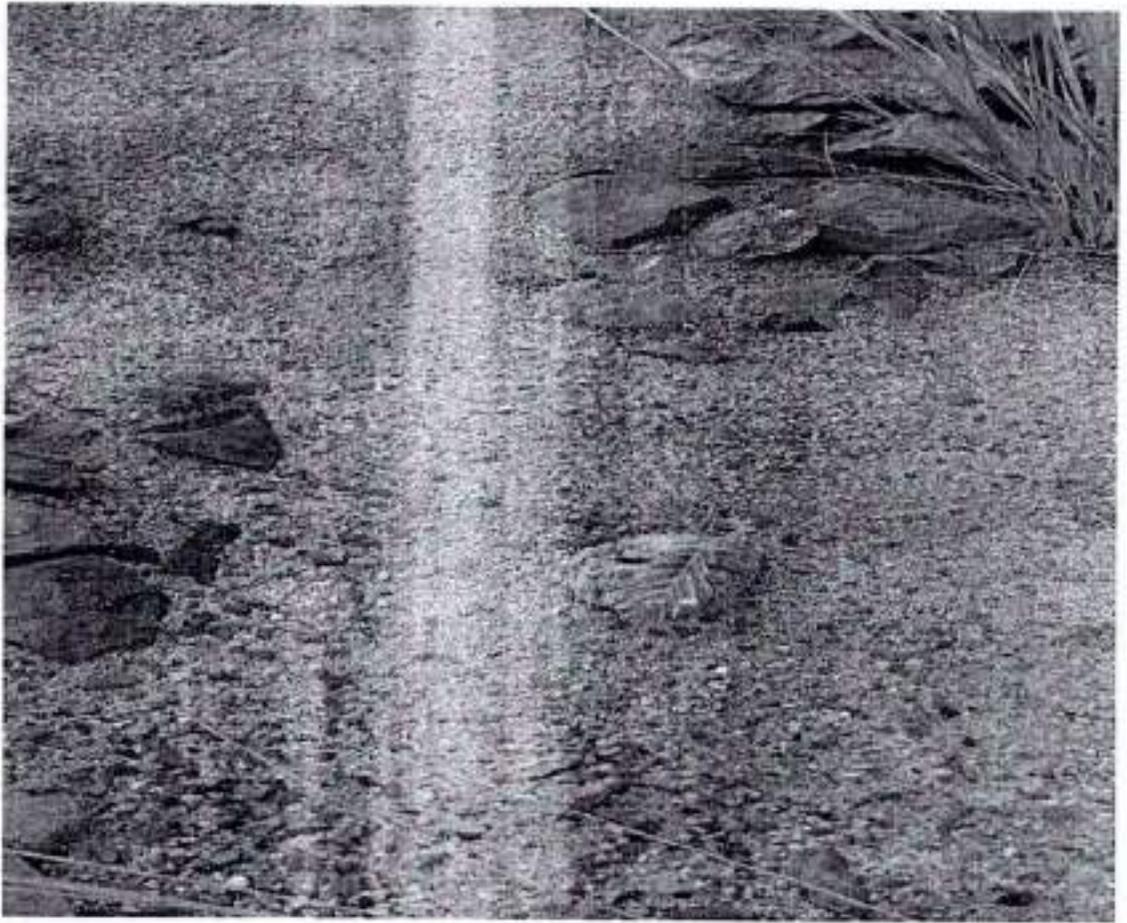


Photo 7: Plantation and seed ball

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Reg. No. 10015-10041  
PHOTO COPY  
ATTESTED  
Rajendra, Baramunda, Jharkhand

730





सत्यमेव जयते

भारत सरकार / Government of India  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Ministry of Environment, Forest & Climate Change  
एकीकृत क्षेत्रीय कार्यालय/Integrated Regional Office  
पता-बंगला सं० ए-२, श्यामली कॉलोनी, राँची- 834002  
Address: Bungalow No. A-2, Shyamli Colony, Ranchi- 834002  
Tel: 0651-2410002, 2410007; E-mail: ro\_ranchi-mef@gov.in



231

मिसिल संख्या. 103-572/ROR-2021/5093

दिनांक: 03.12.2021

सेवा में,

अवर सचिव, आई. ए. डिविजन,  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,  
इंदिरा पर्यावरण भवन, जोरबाग रोड,  
अलीगंज, नई दिल्ली- 110003।

(Kind attention: Shri R. S. Bora)

**विषय:** Public Grievance received from M/ s Sunrise Movers regarding misrepresentation and violation of EAC/EC conditions by M/s CCL at Amrapali Project including issue of tender, annual production 25.0 MTPA instead of 20.16 MTPA, non-completion of conveyor belt construction, etc.- Observations of IRO Ranchi regarding

- प्रसंग:** 1. Ministry's letter no. J-11013/62/2021-IA-II(M) dated 02/07/2021 and email dated 30/09/2021.  
2. Ministry's Clearance (EC) letter no. 11015/109/2003-IA (M), dated 10/05/2021  
3. Ministry's Clearance (EC) letter no. 11015/109/2003-IA.II (M), dated 20/03/2020

महोदय,

I am directed to inform that the Ministry has communicated Public Grievance received from M/s Sunrise Movers regarding misrepresentation and violation of EAC/EC conditions by M/s CCL at Amrapali Project including other issues vide letter no. J-11013/62/2021-IA-II(M) dated 02/07/2021 and email dated 30/09/2021. Ministry vide ibid letter directed IRO, Ranchi to check the ground realities regarding coal transportation route and implementation of environment mitigation measures.

Site inspection of Amrapali Opencast Coal Mine Project of M/s Central Coalfields Ltd. was done by Integrated Regional Office, Ranchi on 11.10.2021 and observations are enclosed as Annexure I and II.

This issues with the approval of Dy. DGF(C) and HoD, IRO, Ranchi.

अनुलग्नक: यथोक्त

विश्वासभाजन,

राजीव रंजन

03.12.21

(राजीव रंजन)

वैज्ञानिक ई/अपर निदेशक

प्रतिलिपि:

- वैज्ञानिक 'एफ',/निदेशक, सदस्य सचिव, कोल-माईनिंग, आई. ए. डिविजन, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोरबाग रोड, अलीगंज, नई दिल्ली- 110003।
- वैज्ञानिक 'ई',/अपर निदेशक, आई. ए. डिविजन, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोरबाग रोड, अलीगंज, नई दिल्ली- 110003।

राजीव रंजन

03.12.21

(राजीव रंजन)

वैज्ञानिक ई/अपर निदेशक



732

**Annexure I**

**Report based on site inspection and documents submitted by project proponent w.r.t Amarpali Opencast Coal Mine project of M/s CCL.**

MoEFCC, New Delhi has directed IRO Ranchi to check the ground realities regarding coal transportation route and implementation of environment mitigation measures w.r.t Amarpali coal project of M/s CCL. Site inspection of the project was done by IRO Ranchi on 11.10.2021. Project proponent submitted some documents related to the project on 19-10-2021 and 24-11-2021. Based on the site inspection and documents submitted by project proponent following are the observations:

**a. Following conditions of EC dated 10.05.2021 are not complied:**

**Specific Condition iv:** Continuous air quality monitoring station was not installed in the project yet.

**Specific condition no. xi:** PP has not planted 100,000 nos. of Sal trees. Nursery of 5 ha Sal trees has not been developed yet.

**Specific condition xiv and Water quality monitoring and preservation condition no. c(ix)-** It was observed that there was very less water flow in Dhudmatia nallah (stream) after water filling point (see photo 28, 29,34). There was a water filling point for mobile water tankers (see photo 33) and water was withdrawn from the Dhudmatia nala/Stream without approval from competent authority of Government. Dhudmatia nala had very less water for some portion (see photo 34). Water was pumped from the mine into Dhudmatia nala directly i.e. without desiltation (see photos 37). Monitoring report of Flow rate of Dhudmatia stream not submitted by PP.

**Specific condition no. xvi:** Fog cannon system is not installed in mine area and OB dump.

**b. Following conditions of EC dated 10.05.2021 are partially complied:**

**Specific condition ii and vi -** There are still some conditions stipulated in earlier EC (i.e. dated 20/03/2020) that are partially complied and it is described in Annexure-II.

**Specific condition no. vii -** Water quality data is not displayed at the site in public domain.

**Specific condition no. xii:** Surface miners were observed deployed on benches in different parts of Amrapali Mine (see photos 1,2,3,12,13,14,15). There was coal dust emissions during the operation of surface miners on the coal benches of the project (see photos 1,2,3,12,13,15). Project authorities showed water spraying system in the surface miners (see photo 14) but it was not sufficient for controlling coal dust emissions. It was suggested to thoroughly wet the coal benches (through mobile water tankers or fixed water sprinklers) and then operate the surface miners. Mobile water tanker was observed sprinkling water on the haul roads near the mine benches (see photo 16). SILO loading till railway siding through in-pit conveyor not installed yet. Coal is transported from Amrapali project to Shivpur Railway siding by trucks through road.

**Air quality monitoring and preservation condition no. b (i) & (ii) -** Continuous ambient air quality monitoring station was not established in core Zone as well as in buffer zone. Online ambient air quality monitoring station was also not installed in the project. Spontaneous combustion was observed at few



places in the O/B dump area (see photo 07.) It was instructed to take steps to eliminate spontaneous combustion in O/B dumps. Project proponent has submitted Ambient Air quality monitoring data of December 2020, March 2021, June 2021 and September 2021. Monitoring has been done by M/s CMPDI ltd. Monitoring has been done at Site office, Weight Bridge, Binglat check post, Weight Bridge near Honhe nala, Honhe Village, Ursu Village, Kumarang Kalan village and Pachra Village. The level of total particulate matter (PM<sub>10</sub>+PM<sub>10</sub>) ranges from 96 to 515 µg/m<sup>3</sup>, PM<sub>10</sub> ranges from 41 to 263 µg/m<sup>3</sup>, PM<sub>2.5</sub> ranges from 21 to 117 µg/m<sup>3</sup>, SO<sub>x</sub> and NO<sub>x</sub> were found within the stipulated limit. Heavy metals monitoring data of As, Ni, Pb, Cu, Cd, Cr for December 2020, March 2021 and June 2021 quarter has been submitted by Project proponent. Monitoring data of Hg has not been submitted. Level of Ni exceeds in December-2020 quarter at all 4 locations. Project proponent has also submitted Ambient Air quality monitoring data of Shivpur siding-I. Monitoring has been done by M/s CMPDI. The level of total particulate matter (PM<sub>10</sub>+PM<sub>10</sub>) ranges from 225 to 349 µg/m<sup>3</sup>, PM<sub>10</sub> ranges from 88 to 183 µg/m<sup>3</sup>, PM<sub>2.5</sub> ranges from 40 to 88 µg/m<sup>3</sup>, SO<sub>x</sub> and NO<sub>x</sub> were found within the stipulated limit.

**Air quality monitoring and preservation condition no. b (iii), (iv) (vi)-** Mobile water tanker was observed (sprinkling water) on the haul road in the project. (see photos 09, 27). Lot of trucks waited for loading near coal dump of the mine (see photos 18,39,40). There was coal dust emission on the haul roads near coal dump yard (see photo 39, 40). A mobile water tanker was observed sprinkling water on the haul road adjacent to coal dump yard (see photo 27). Since the coal loaded trucks moved from coal dump yard to weighbridge area without any Tarpaulin covering, there was coal spillage on haul roads and therefore dust emissions on haul roads. The dust emissions could also pose adverse health effects on truck drivers, helpers and other workers present at or near coal dump yard and nearby area.

Tarpauline covering was not observed on few coal transportation trucks carrying Coal between Amrapali Mine to Shivpur railway siding. One of such trucks was stopped and returned back with instructions for proper covering and then only transporting Coal (see photos 45 & 46). Water tankers were observed sprinkling water on the route from Amrapali mine to Shivpur Railway siding(See photos 53 & 54). Wind sheets were observed on one side of the Shivpur Railway Siding. At some places in project, tarpauline covering on coal transportation trucks was not done in proper manner and there were areas where coal spillage would occur (see photo 65). Small coal heaps were observed almost throughout the coal transportation route from mine to Shivpur Railway Siding (see Photos(43,45,46,47,48,52,53,61,62). Since there were water bodies, ponds, adjacent to the Coal transportation route (see Photos 43,47,48,49,50) Coal, Silt from those heaps would flow into natural water bodies. Dozing was observed for Cleaning/assimilating these Coal dust/depris (see photo 55). At one place along the Coal transportation route payloader was used for Cleaning and loading Coal dust/depris on the truck (see Photo 63). However project proponent should take strict steps for complete tarpaulence covering of all the Coal transportation trucks and also ensure that there is no spillage of coal on the route from project to Shivpur Railway siding. Some households dwellings were observed adjacent to the Coal transportation route from (Amrapali mine to Shivpur Railway Siding) (See Photo 62).

Fixed water sprinklers were operational at the Shivpur Railway Siding (See Photo 59). However little coal dust emissions was still observed during coal loading on Rail wagons (See Photo 58) there. It was instructed to improve coal wetting arrangements at the Shivpur railway siding so that there is elimination of coal dust emissions during loading/unloading. Plantation along the railway siding was observed on one side (see Photos 57,59, 60).



234

GPS coordinates of some points were taken during inspection of Amrapali project and they are shown in Google image photo (see photo 77). Latitude, Longitude at Shivpur Railway siding and coal transportation route was also taken which is shown in photo 77. Numbers 1,2,3,4,5,6,7,8,9 on coal transportation route (from Amrapali Mine to Shivpur Railway Siding) denote points where GPS coordinates were taken.

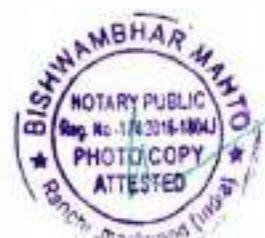
**Air quality monitoring and preservation condition no. b (vi)-** Coal dust/dust emissions were observed during payloaders loading the coal /OB into the trucks/dumpers in the mines (see photos 10,11). Arrangements should be made (eg: detachable hose pipe arrangement etc.) so that water spraying on O/B and coal benches can be done for wetting during loading operation. Since there were villages near to the mine it was instructed to minimize/eliminate dust pollution including coal dust pollution (see photo 26) Dust control measures- Project Proponent has submitted diesel consumption and working hours of from the period January 2021 to September 2021. Average running hours of water tankers were approximately 8 hrs/day, which should be further improved. Project Proponent should ensure 3-4hr/ shift of water sprinkling per tanker especially in dry seasons.

**Water quality monitoring and preservation condition no. c (vi):** At few places along the route from Amrapali mine to Shivpur Railway siding kutchra drains were constructed (See Photo 51, 52, 56.) Grassing and vegetation was not developed on the Bingalat O/B dump facing Dhudhmatia nallah/stream for some portions (see photo 38). Retaining wall was not constructed on the periphery of Bingalat O/B dump facing Dhudhmatia nallah/Stream for some portions. Water from this Dhudhmatia nallah/Stream then flows into Barki river. Catch drains were observed around some portions of O/B dump (see photo 41) but it needed desiltation periodically to prevent silt flowing on the haul road adjacent to it and resulting in dust pollution (see photo 41). Catch drain and siltation pond was observed on one side of the coal heap at weighbridge (see photo 42). Retaining wall was observed around the Honhe external O/B dump (see photo 71). Catch drains and siltation ponds were observed around Honhe O/B dump (see photo 72, 73) for most portions.

There was a river/nallah water body in the coal transportation route between Amrapali Mine to Shivpur Railway Siding (see photos 49, 50) Catch drains and siltation pond was provided on only one side of the road adjacent to river/nallah (Photo 51) but on the remaining three portions catch drains and siltation ponds were not provided. Catch drains and siltation ponds were observed on one side of the Shivpur railway siding (see photos 57 & 60).

**Water quality monitoring and preservation condition no. c (viii):** Washing platform and oil & grease trap was observed in the project and it was functional (see Photo 67). Since Dhudhmatia nallah flows adjacent to this oil & grease trap all steps/care should be taken that no water from the oil & grease trap tanks flows into the nallah (see Photo 68). STP was not established in the project.

**Green belt condition no. g (ii) -** New plantations were developed on the backfilled O/B dump (see photos 19, 20, 21, 22, 23, 24). In some portions it was observed that new plants have died and therefore the density was less (see photos 21, 22). PP has submitted copy of letter CCL/HoD/ Env & Forest/ GA/ W.O./ 2020- Plantation/ Chatra South/ 2020/1282-1302 dated 10.05.2020 ( award of work) in which CCL has informed DFO, Chatra about approval of the estimate/scheme of DFO, Chatra South Forest Divison, Chatra for a total value of Rs 53,26,036.70/- only for carrying out plantation work over 20.54 ha of OBD/ backfilling area comprising of 51350 number of saplings of mixed species. Greenbelt consisting of 3-tier plantation of width less than 7.5m all along the mine lease area has not been started except at south side of mine. Some plantations was observed at the south side of the Amrapali mine pit (see photo 74).



**c. Following conditions of EC dated 10.05.2021 are being complied but further action needed:**

**Specific condition no. xviii and land reclamation condition no. v-** Grassing and vegetation was observed on some portions of the Honhe external O/B dump (see photos 71, 72). However at many other portions the O/B material was exposed. Project authorities explained that due to rehandling of waste from Honhe O/B dump at some portions the grassing & vegetation got destroyed. Top soil dump was observed in the mine project (see photo 75 & 76). Grassing and vegetation have been developed on the West and North side of the Bingalat O/B dump. (see photos 36,37).

**Water quality monitoring and preservation condition no. i, iii & iv -** Mine water effluent monitoring data of December 2020, March 2021 June 2021 and September 2021 quarter has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. The parameters were found within limit. However, Project proponent should submit the Effluent water monitoring data of workshop effluent. Water quality monitoring data upstream and downstream of Honhe Nailah of June 2021 quarter has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. Project proponent has also submitted borewell water monitoring data. Monitoring has been done by M/s CMPDIL. As per the data submitted parameters were found within limit.

**Land Reclamation condition no. f (iii):** Backfilling of O/B was being done in the project (see photo 4,6,11). However, at some portions especially adjacent to haul road between internal O/B dump and Bingalat O/B dump the O/B dump height appeared more than the natural elevation of the area (see photo 8,34&37).

**d. Some other observations are given below:**

**Specific Condition no. i & Statutory compliance condition no. a (iv)-** Project Proponent has submitted a copy of application submitted to JSPCB for CTE (for production capacity 20.16 MTPA). PP has not received CTE for 20.16 MTPA coal production by JSPCB yet. Project proponent has submitted a copy of CTE ref no. JSPCB/HO/RNC/CTE-7811934/2021/7 dated 08-01-2021 obtained for 14.4 MTPA coal production.

**Specific Condition no. ix and public hearing and human health issues condition no. ii and iii -** Project Proponent has submitted number of IME and PME conducted on workers which is as follows:

Year	IME departmental	IME Contractual	PME departmental
2015	122	210	11
2016	15	47	21
2017	21	126	21
2018	11	384	26
2019	07	192	78
2020	03	131	82
2021 up to September	62	101	84

Project proponent has submitted numbers of PPEs issued to workers in the year 2020 and 2021:

PPE	Year 2020	Year 2021
Mining shoe	917	154
Helmet	722	56



Gum Boot	210	30
<b>Masks</b>	<b>8006</b>	<b>2105</b>
First aid kit	3	39
Fluorescent jacket	1060	69
<b>Ear Muffs</b>	<b>87</b>	<b>Nil</b>
Goggles	376	Nil

Project proponent has submitted details of VTC training undertaken in past years, which is as follows:

S. No.	Training	Year 2020	Year 2019	Year 2018
	Refresher VTC training	63	46	13

Project proponent has also submitted training programme for the workers (Departmental & Contractual), which is given below:

S. No.	Training	Year 2020	Year 2021
1	VTC	222	195
2	Refresher	63	Nil
3	Basic VT	02	29

**Specific condition xvii & statutory compliance condition no. v** - Project proponent reported that NOC for ground water abstraction has been issued from Central Ground water Authority 05.02.2021. A copy of the same has been submitted by Project proponent. NOC has been obtained for in the same of Amrapali OCP (12.0 MTY) of M/s Central Coalfields Limited. Project proponent has also submitted a copy of application (Application no. 21-4/699/JH/MIN/2020 dated 28/11/2020) has been submitted to CGWA for permission to dewater ground water for enhanced production capacity. In the submitted application it is mentioned that "present production capacity of the project is 14.4 MTY and proposed production target is 25.0 MTY".

**Statutory compliance condition no. a (iv)** - Project Proponent has submitted a copy of CTO (production capacity 14.4 MTPA) ref no. JSPCB/HO/RNC/CTO-9781012/2021/284 dated 15-02-2021 which is valid up to 31-12-2021. PP has not received CTE for 20.16 MTPA coal production by JSPCB yet.

**Air quality monitoring and preservation condition no. b (v)** Project proponent has submitted copies of few valid PUC certificates of vehicles.

**Water quality monitoring and preservation condition no. c (iii):** One Piezometer was observed in the project for groundwater level measurement.

**Water quality monitoring and preservation condition no. c(ix)-** Catch drain and retaining wall was observed on the West side of the Bingalat O/B dump (see photos 35 &36). Grassing and vegetation have been developed on the West & South side of the Bingalat O/B dump.(see photos 36,37).

**Noise and vibration monitoring and preservation condition no. i** - Noise level monitoring data of December 2020, March 2021 June 2021 and September 2021 quarter has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. During day time noise level data ranges from 42.6 dB(A) to 69.2 dB(A) and at night noise level data ranges from 43.1 dB(A) to 62.3 dB(A). Project proponent has also submitted noise level monitoring data of Shivpur siding-1 and Shivpur siding-2 area.



739

Monitoring has been done by M/s CMPDIL. During day time noise level data ranges from 54.6 dB(A) to 70.2 dB(A) and at night noise level data ranges from 45.8 dB(A) to 61.4 dB(A).

**CER condition no. iii-** Project proponent has submitted Office order copy of PIT Environmental committee constituted at Amrapali OCP on 15/12/2019. Project proponent has also submitted office order copy dated 19.10.2021 of Environment Management Cell for Amrapali- Chandragupta Area with name and designation of personnel engaged.

**Miscellaneous condition no. i** - Project Proponent has submitted copy of newspaper advertisement published in Prabhat Khabar on 20.05.2021. Project proponent also reported that publication has been done in Hindustan (Ranchi) and Times of India (Ranchi) on 20/05/2021.

**Miscellaneous condition no. ii-** Project proponent has submitted a copy of receipt of EC marked to Mukhiya- Pokla Panchayat and Up-Mukhiya Koed.

**Miscellaneous condition iv:** Digital display board displaying environmental parameters such as PM10, etc. was observed at Project office in the project (see photo 70).

Water was observed in the sump of Amrapali Mine project (see photo 17).

Top soil dump was observed in the mine project (see photo 75 & 76).

PP has submitted proceedings of the public hearing held on 17-11-2020. Project proponent also submitted brief summary of action taken of public consultation. PP submitted that action has been taken on activities like plantation, check dams, ponds, top soil preservation, R&R compensation, Health Camp and water sprinklers.

Project proponent has submitted a copy of slope stability studies for Amrapali OCP done by Prof. Amit Verma, Dept. of Mining Engineering, IIT-BHU.

**e. Other observations w.r.to coal transportation route from Amrapali coal mine to Shivpur Railway siding**

GPS coordinates of some points were taken during inspection of Amrapali project and they are shown in Google image photo(see photo 77). Latitude, Longitude at Shivpur Railway siding and coal transportation route was also taken which is shown in photo 77. Numbers 1,2,3,4,5,6,7,8,.9 on coal transportation route (from Amrapali Mine to Shivpur Railway Siding see photo 77) denotes points where GPS coordinates were taken.

PP has submitted copy of letter no. GM/HOD(E&F)/2021/140 dated 06.02.2021 addressed to Member Secretary (Coal Mining) IA Division, MoEFCC, New Delhi i.e. Submission of additional information in report of Amrapali Expansion opencast Coal Mine (25MTPA) Phase 1. In the annexure to the above letter a Plan Showing Coal transportation road adjacent to Honhe village is provided (page no. 6). It is mentioned (page no. 6) that "Following are the additional control measure suggested to bring down the impact of proposed transportation activity on Honhe village.

- Existing coal transportation road will be converted into PCC roads.
- Fixed sprinklers are proposed near Honhe village on coal transportation road.
- 2 no. of road sweeping machines will be deployed to remove dust on roads.
- Wind Barriers will be installed on either side of coal transportation road near Honhe village in order to contain the impact of coal transportation on nearby settlement."



However fixed sprinklers, road sweeping machines, wind barriers along coal transportation road not installed/deployed. *Impact of coal spillage on coal transportation route has been explained in detail in the observations above.*



Photos 01& 02: Photos of surface miner deployed in the project and some coal dust emissions during its working.

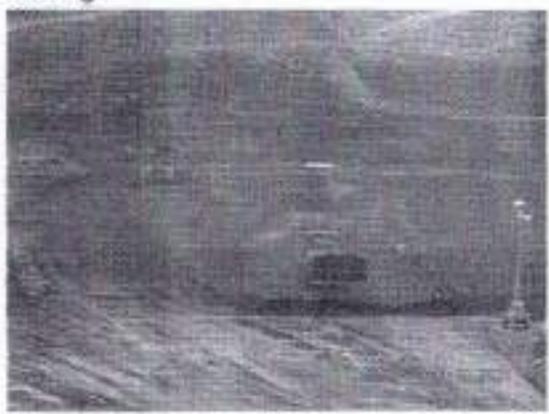


Photo 03: Photo of coal dust emissions during operation of surface miner



Photo 04: Photo of backfilling in the project.



Photo 05: Photo of mine pit in the east side/ southeast side.



Photo 06: Photo of backfilling and sump in the Amrapali mine



739



Photo 07: Photo of spontaneous combustion and smoke in the OB dump in the project



Photo 08: Photo of OB dump between internal dump and Bingalat external OB dump



Photo 09: Photo of mobile tanker sprinkling water on the haul roads in the project.



Photo 10: Photo of dust emissions during loading on the trucks



Photo 11: Photo of dust emissions during loading on the trucks



Photo 12: Photo of coal dust emissions during operation of surface miner in the project



740



Photo 13: Photo of coal dust emissions during operation of surface miner in the project

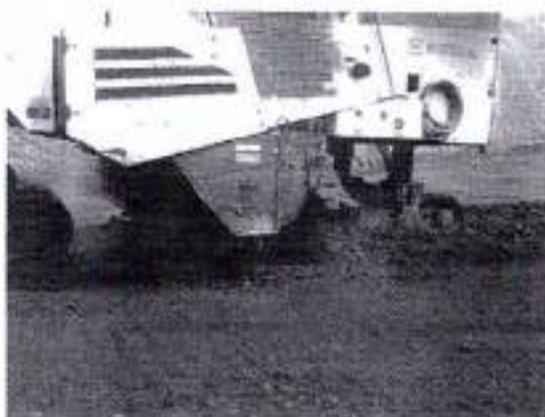


Photo 14: Photo of water spraying arrangement in the surface miner

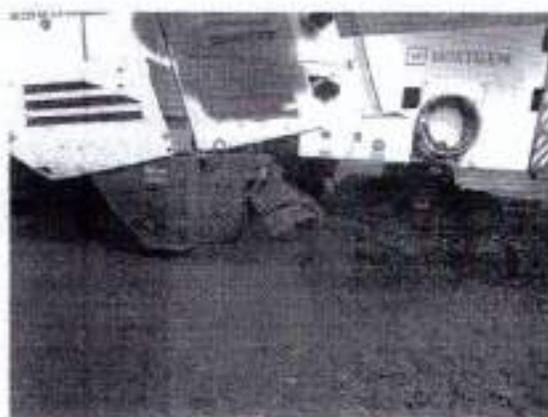


Photo 15: Photo of coal dust emissions during operation of surface miner in the project.



Photo 16: Photo of mobile water tanker used for sprinkling water inside mine.



Photo 17: Photo of water in the sump of Amrapali Mine Backfilling can also be seen.



Photo 18: Photo of large number of trucks waiting for coal loading at the coal dump



741



Photo 19 & 20: Photos of plantations over slopes of internal OB dump in the Amrapali mine project.



Photo 21 & 22: Photos of plantations over slopes of internal OB dump in the Amrapali mine project where density of plants have reduced.



Photo 23 & 24: Photos of plantations over OB dump in the Amrapali Mine project





Photo 25: Photo of a view of the Amrapali mine



Photo 26: Photo of village dwellings near the Amrapali mine. Water in mine sump can also be seen



Photo 27: Photo of mobile water sprinkler used for water sprinkling on the haul roads.



Photo 28: Photo of very less flow of water in the Dudhmatia nallah/stream.



Photo 29: Photo of water in the Dudhmatia nallah at the water withdrawl point



Photo 30: Photo of kutchha drain between haul road and Dudhmatia nallah/stream

743



Photo 31: Photo of siltation pond between haul and Dudhmatia nallah/stream



Photo 32: Photo of kutcha drain between haul road and Dudhmatia nallah/stream



Photo 33: Photo of water tankers of the project filling water from Dudhmatia nallah/streams



Photo 34: Photo of very less water in the Dudhmatia Nallah/stream after the water withdrawl point.



Photo 35: Photo of retaining wall around the West direction of Bingalat OB dump



Photo 36: Photo of grassing and vegetation on the slopes in the west direction of the Bingalat OB dump





Photo37:Photo of Dudhmatia stream,grassing & vegetation on Bingalat OB dump,another OB dump in left side



Photo 38: Photo of Bingalat OB dump and Dudhmatia nallah flowing adjacent

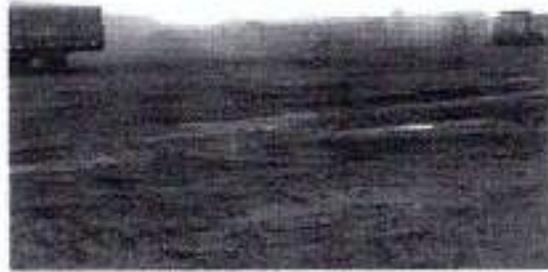


Photo 39& 40: Photos of dust emissions by coal transportation trucks near coal stock yard.



Photo 41: Photo of small drain on one side of OB Dump in the project



Photo42:Photo of catch drain and siltation pond on one side of one of the weighbridges in the project.

745



Photo43:Photo of small heaps of coal/ debris on roadside on the route to Shivpur siding



Photo44:Photo of incomplete tarpaulin covering on the coal transportation trucks



Photo 45& 46: Photos of uncovered coal transportation truck used for coal transportation to Shivpur Railway siding



Photo 47 & 48: Photo of coal heaps/ silt along roadside (between mine project to Shivpur Railway siding) and adjacent to natural water bodies/ponds.



746



Photo 49& 50 : Photos of a stream/ nallah flowing in between coal project and Railway siding in which coal dust/ silt would flow



Photo51:Photo of catch drain and siltation pond on one approach side of the stream Photo52: Photo of drain at some places along the coal transportation route(mine project to Shivpur Rly siding)



Photo 53& 54: Photos of mobile water tankers sprinkling water on coal transportation route (mine project to Shivpur Railway siding)

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747



Photo 55: Photo of dozer engaged in coal/debris accumulation on coal transportation route



Photo 56: Photo of drain at some places along the coal transportation route



Photo 57: Photo of drain at the Shivpur railway siding



Photo 58: Photo of some dust emissions during loading of coal in Rail wagons at the Shivpur Railway siding



Photo 59: Photo of operational fixed water sprinkler and wind sheets at Shivpur Railway siding



Photo 60: Photo of drain and siltation pond at Shivpur Railway siding



748

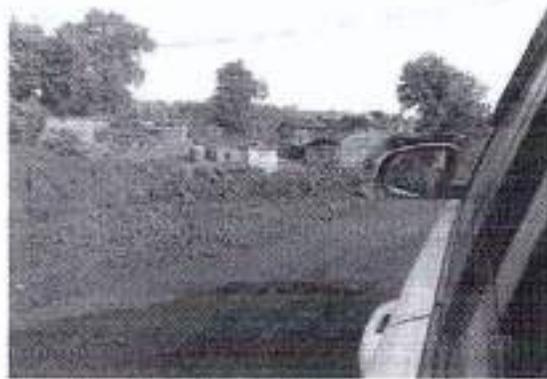


Photo 61& 62: Photos of small heaps along the coal transportation road. Dust laden leaves and some houses adjacent to the road can also be seen.



Photo 63: Photo of loading of debris along roadside in the coal transportation road.



Photo 64: Photo of drain on the opposite side of weighbridge



Photo 65: Photo of improper tarpaulin covering on one of the coal transportation trucks



Photo 66: Photo of Piezometer borehole in the Amrapali mine project





Photo67:Photo of washing platform and oil & grease trap in the Amrapali project



Photo68:Photo of Dudhmatia nallah adjacent to the oil and grease trap



Photo 69: Photo of catch drain around one of the OB dumps in the project



Photo 70: Photo of digital display of environmental parameters,i.e. PM<sub>2.5</sub>, Etc. at the PO office



Photo 71: Photo of exposed Overburden material and retaining wall around Honhe external OB dump

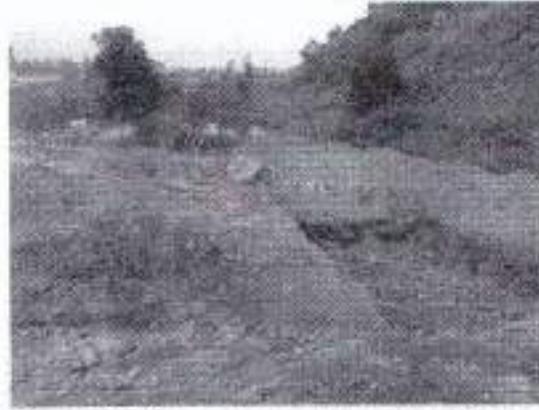


Photo 72: Photo of catch drain and siltation pond around one side of Honhe OB dump.



750



Photo 73: Photo of catch drain around one side of Honhe OB dump



Photo74:Photo of plantations on the south side of the Amrapali mine



Photo 75& 76: Photos of top soil dump and OB dump in the Amrapali coal mine project



87



Photo 77: Google Image photo of Amrapali project, coal transportation route and Shivpur Railway siding showing the points where GPS coordinates were taken during inspection.

  
 (Rajeev Ranjan)  
 05.12.24  
 Scientist 'E', Additional Director

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752

**Annexure II**

Amrapali Opencast Coal Mine Project of M/s CCL has received EC from MoEFCC New Delhi for 20.16 MTPA ( peak) production on 10<sup>th</sup> May, 2021. PP has not submitted six monthly compliance report to IRO Ranchi till date ( i.e.for EC dated 10.05.2021). Six monthly compliance reports for earlier ECs had been submitted by PP.

Here it is pertinent to mention that during last inspection of the project on 21.12.2020, some partial compliances were observed w.r.to the last EC (i.e. EC No J-11015/109/2003-IA.II (M) dated 20.03.2020). In the present EC dated 10<sup>th</sup> May, 2021, in 'specific condition no. vi' it is mentioned that "PP shall complete all non-compliances/ partial compliances in one year and action taken report shall be submitted to Regional office of MOEF&CC"; also in the 'specific condition no. iv' it is mentioned that "All the non- compliance conditions stipulated in earlier ECs shall be complied within 4 months". Latest observation of IRO Ranchi on the compliance status of partial compliance conditions of the last EC i.e. EC dated 20.03.2020 is as follows (as can be seen from latest observations in the table below many of the EC conditions are still partially complied) :

Sl. No	Partial compliance/being complied but further action needed reported vide Integrated Regional office Ranchi's letter no. 103-557/ROR-2020/4447 dated 13.01.2021	Latest observation and remarks of the Integrated Regional Office, Ranchi on the basis of site inspection dated 11.10.2021 and others documents submitted by project authorities
1	Some of fixed water sprinklers in line ( at the weighbridge area) were not operational. Project authorities informed that due to pipe breakage some sprinklers were non operational. It was instructed to make arrangements so that water sprinklers remain operational regularly and it should be rectified as soon as some problems are encountered there. Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks move frequently. Grader/scrapper was used for levelling, cleaning of road between Amrapali Mine project and Shivpur Railway siding. But coal dust/debris has been pushed on both sides of roads. Water tanker was observed sprinkling water on the coal transportation road to Amrapali siding but it did not seem sufficient. More water tankers should be deployed on the route for water sprinkling. Road sweeping machines can also be deployed. Steps should be taken to ensure that there is no coal spillage on the road because there were village dwellings/habitations adjacent to that road who would be adversely affected by the coal dust emissions there. Project Proponent has submitted running hours of 3 departmental (3 <sup>rd</sup> tanker operational since 11.08.2020) and 13 contractual water tankers. Average running hours of departmental water tankers were approximately 4-5 hr/day which is less than satisfactory. The running hours of contractual water tankers were approximately 4 hr/day, which is less than	<b>Partially complied.</b> Fixed water sprinklers were not observed in the mine. The earlier fixed water sprinklers were all taken out as the Mine pit had extended to that area (see photos 1&2). Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks move frequently. Coal dust/debris were still observed on road (coal transportation route from Amrapali Mine project to Shivpur Railway Siding due to coal spillage by coal transportation trucks. Project Proponent has submitted diesel consumption and working hours of three departmental water tankers from the period January 2021 to September 2021. Average running hours of water tankers were approximately 8 hrs/day, which should be further improved. Project Proponent should ensure 3-4hr/ shift of water sprinkling per tanker especially in dry seasons. Running hours of contractual water tankers has not been submitted.



753

	satisfactory. Project Proponent should ensure 3-4hr/ shift of water sprinkling per tanker especially in dry seasons. (Condition vi)	
2	Some green belt development could be seen in the project. However thick green belt of adequate width at the final boundary in the downward direction has not been developed yet by project authorities to mitigate/check the dust pollution. (Condition ix)	<b>Partially complied.</b> Green belt development over O/B dumps/ backfilled areas taken up by project proponent. Thick green belt of adequate width at the final boundary in the downward direction has not been developed yet by project authorities to mitigate/check the dust pollution.
3	Water was withdrawn from Dhudhmata nala for water sprinkling in the project by water tankers. However, project authorities did not submit surface water / river water withdrawal permission from concerned department.(Condition x)	<b>Partially complied.</b> Compliance status same as previous report. (i.e. dated 13.01.2021)
4	Groundwater was withdrawn for water utilization for water sprinkling, green belt development, etc. at the Shivpur railway siding area. However, project authorities did not submit any permission/approvals from competent authority (CGWA, etc.) for such Groundwater withdrawal there. (Condition xi)	Project Proponent submitted that "No Objection Certificate (NOC) For Ground Water Abstraction of 4,220 m3/day for Amrapali OCP has been issued on 05.02.2021, which includes water sprinkling, green belt development and other activities for Amrapali OCP". Project proponent reported that NOC for ground water abstraction has been issued from Central Ground water Authority 05.02.2021. A copy of the same has been submitted by Project proponent. NOC has been obtained for in the same of Amrapali OCP (12.0 MTY) of M/s Central Coalfields Limited. Project proponent has also submitted a copy of application (Application no. 21-4/699/JH/MIN/2020 dated 28/11/2020) has been submitted to CGWA for permission to dewater ground water for enhanced production capacity. In the submitted application it is mentioned that "present production capacity of the project is 14.4 MTY and proposed production target is 25.0 MTY". However, Groundwater withdrawal permission for water utilization for water sprinkling, green belt development, etc. at the Shivpur railway siding area has not been submitted.
5	Grassing and vegetation have been developed at many places on Bingalat O/B dump. However there are still many places on the Bingalat O/B dump where grassing and vegetation has not been developed. Grassing and	<b>Partially complied.</b> Grassing and vegetation still not developed on the sides/slopes of O/B dump facing Dudhmata nala. There are still many



	sides/slopes of O/B dump facing Dhudhmatia nala and on remaining portions also. <b>(Condition xiv)</b>	grassing and vegetation has not been developed.
6	<p>Efforts made for compliance. Work in progress. Project proponent has submitted Action taken report dated 16.12.20. Efforts have been made for compliance of many EC (old) conditions. However, there still remains some partially complied conditions as given below:</p> <ul style="list-style-type: none"> <li>➤ There has been some improvement in grassing and vegetation on O/B dumps but still there remains portion where grassing and vegetation have not been developed. There are two external dump in the project, Honhe O/B dump and Binglat O/B dump. Partially complied, work in progress (Specific condition iii of earlier EC).</li> <li>➤ Catch drain and siltation ponds around Honhe dump has been made. However, catch drains and siltation pond (in the remaining portions) around Binglat O/B dump (especially adjacent to Dhudhmatia nala) has to be made. Similarly Catch drains &amp; siltation ponds around all coal dumps/ heaps /stocks needs to be constructed-Partially complied. (Specific condition iv of earlier EC).</li> <li>➤ Retaining wall made around Honhe O/B dump. Retaining wall around Binglat O/B dump especially facing Dhudhmatia nala needs to be constructed-Being complied but further action needed. (Specific condition v of earlier EC).</li> <li>➤ There have been improvements in green belt development. However, Avenue plantation on both side of haul road and green belt around bunker and surrounding area for coal stock has not been developed as per EIA/EMP report: Partially complied, efforts made for compliance but work in progress(Specific condition vi of earlier EC).</li> <li>➤ Mitigative measures for preventing pollution in Dudhmatia nala (that flows in river Barki) needs to be taken- Partially complied, action taken for compliance. (Specific condition xiii of earlier EC).</li> <li>➤ Project proponent has submitted health check up report of around 5 K.M radius of Magadh Amrapali area for five years, from 2013-2018. Comparative analysis of the same has not been submitted by PP.</li> <li>➤ Working hours of water tankers remain less than satisfactory. Fixed water should be provided for main haul roads dust suppression. Being complied but further action needed. (General condition vi of earlier EC). <b>(Condition xv)</b></li> </ul>	Details about grassing and vegetation, catch drains, siltation ponds, retaining wall, etc. provided in the compliance status of new EC i.e. EC dated 10.05.2021.
7	Action being taken for compliance but more efforts needed for compliance of this EC condition till March 2022. More plantations needs to be done along the	<b>Partially complied.</b> Green belt development over O/B dumps backfilled areas taken up by project proponent but



755

	villages and transportation route for compliance of this EC condition. (Condition xvi)	condition still partially complied. More plantations needs to be done along the villages and transportation route for compliance of this EC condition.												
8	Activity wise expenditure (on items related to CER) i.e. details of actual expenditure incurred on CER has not been submitted to this office (Condition xvii)	Project proponent reported that a fund provision of Rs. 4.29 crore has been allocated for CER. PP submitted that allocations has been made for activities like Infrastructure development (Road, electricity, Drinking water etc), Skill Development and employment, Medical camp, Health & Hygiene, Education, Development of surface water bodies, Community plantation.												
9	As per the plan submitted, Honhe External OB dump is within 100m distance from Bahut Chuha nala. Catch drains and siltation ponds have been made around Honhe OB dump to prevent any silt flowing in Bahut Chuha nala. (Condition xxvii)	Compliance status same as earlier report. (i.e. dated 13.01.2021)												
10	Though efforts have been made for compliance of old EC conditions still there remains some conditions that are still partially complied. See specific condition xv for descriptive compliance status. (Condition xxviii)	Partially complied. Though efforts have been made for compliance of old EC conditions still there remains some conditions that are still partially complied.												
11	PP has also reported that copy of application made for CTE of 14.4 MTPA vide no: 7811934 dated 11.03.2020 has been submitted to JSPCB. It implies project proponent has neither received CTE for 14.4 MTPA (Peak) production nor they have valid CTO for 14.4 MTPA production till date. (Condition ii & (a) iv)	Project Proponent has submitted a copy of application submitted to JSPCB for CTE (for production capacity 20.16 MTPA). PP has not received CTE for 20.16 MTPA coal production by JSPCB yet. Project proponent has submitted a copy of CTE ref no.JSPCB/HO/RNC/CTE-7811934/2021/7 dated 08-01-2021 obtained for 14.4 MTPA coal production.												
12	Tarpaulin covering was done on the coal transportation trucks. However, there was coal spillage on coal transportation routes. It may be due to improper covering, loading of coal till the top of truck, etc. It was instructed that a free board of minimum 5 cm in all loaded vehicles/trucks along with proper covering with impervious material to prevent escape of times should be followed for all coal transportation trucks. (Condition iii)	Partially complied. Tarpauline covering was not observed on few coal transportation trucks carrying Coal between Amrapali Mine to Shivpur railway siding. One of such trucks was stopped and returned back with instructions for proper covering and then only transporting coal (see photos 45 & 46). Coal spillage on coal transportation route still observed.												
13	PME of contractual workers should also be submitted. (Condition vii, xii, xxi & (h) ii)	Project Proponent has submitted number of IME and PME conducted on workers which is as follows: <table border="1"> <thead> <tr> <th>Year</th> <th>IME departme ntal</th> <th>IME Contract ual</th> <th>PME department al</th> </tr> </thead> <tbody> <tr> <td>2015</td> <td>122</td> <td>110</td> <td>11</td> </tr> <tr> <td>2016</td> <td></td> <td></td> <td>21</td> </tr> </tbody> </table>	Year	IME departme ntal	IME Contract ual	PME department al	2015	122	110	11	2016			21
Year	IME departme ntal	IME Contract ual	PME department al											
2015	122	110	11											
2016			21											



		2017	21	126	21						
		2018	11	384	26						
		2019	07	192	78						
		2020	03	131	82						
		2021	62	101	84						
		up to September									
		PME of contractual works has not been submitted.									
14	Project proponent should submit skill development activities undertaken exclusively at Amrapali OCP. (Condition viii)	<p>PP reported that "Skill development activities undertaken exclusively at Amrapali OCP are given below-</p> <p>a. Amrapali project has procured 100 sewing machines for distribution to the Panchayats.</p> <p>b. PAPs were selected for CETI (Mining and Sirdar training) and BTTI (electrician and welder training). The details are given below: -</p> <p>c. Inauguration of 'Sewing Training Center' under Amrapali Project, District Chatra under CSR initiative. Women of displaced villages in the center will be imparted 60 days training in two batches of 20-20 each. Besides, free sewing machine will also be made available after training. Further, skill development training like automobile repairing, food processing, motor winding, driving, electrician, tailoring, computers etc will be conducted under CER at an approximate cost of Rs 50 Lakhs in coming years.</p> <p>Skill development activities undertaken exclusively at Amrapali OCP are given below-</p> <p>1. Amrapali project has procured 100 sewing machines for distribution to the Panchayats.</p> <p>2. PAPs were selected for CETI (Mining and Sirdar training) and BTTI (electrician and welder training).Details are as under-</p> <table border="1"> <thead> <tr> <th>Name of training</th> <th>No. of PAPs</th> </tr> </thead> <tbody> <tr> <td>CETI (mining and sirdar training)</td> <td>10</td> </tr> <tr> <td>BTTI (electrician and welder training)</td> <td>36</td> </tr> </tbody> </table>				Name of training	No. of PAPs	CETI (mining and sirdar training)	10	BTTI (electrician and welder training)	36
Name of training	No. of PAPs										
CETI (mining and sirdar training)	10										
BTTI (electrician and welder training)	36										



757

15	Project Proponent (PP) has submitted a copy of blasting permission obtained from DGMS (no.Ranchi area/825-27). Permission obtained was valid upto three years from the date of issue of letter but in the submitted copy date of issue of letter is not legible. (Condition xviii)	Compliance status same as earlier report (i.e. report dated 13.01.2021).
16	Some of the stipulations of the OM that are relevant to the project are yet to be complied completely: Inadequate provision for prevention of coal dust and OB silt material flow into Dhudhmatia nala, Absence of permanent water sprinklers in main haulage road in mine, etc. (Condition xxii, (h) v, (j) vi )	Compliance status same as earlier report (i.e. report dated 13.01.2021).
17	From the submitted data it is not clear whether the noise monitoring has been done at night or not. (Condition xxiii)	<b>Complied.</b> Noise level monitoring data of December 2020, March 2021 June 2021 and September 2021 quarter has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. During day time noise level data ranges from 42.6 dB(A) to 69.2 dB(A) and at night noise level data ranges from 43.1 dB(A) to 62.3 dB(A). Project proponent has also submitted noise level monitoring data of Shivpur siding-1 and Shivpur siding-2 area. Monitoring has been done by M/s CMPDIL. During day time noise level data ranges from 54.6 dB(A) to 70.2 dB(A) and at night noise level data ranges from 45.8 dB(A) to 61.4 dB(A).
18	<b>Condition xxiv &amp; (g) i:</b> Project Proponent has submitted a copy of letter no. HOD(E&F)/20/1130 dated 18/02/2020 submitted to DFO, Chatra (South). In the submitted letter it was mentioned that application for EC has been made for 16.8 MTPA. However, in the preliminary conservation plan prepared by Institute of Forest Productivity, Ranchi targeted production of Amrapali OCP has been mentioned as 12.0 MTY. Project Proponent should clarify the above anomaly. (Condition xxiv & (g) i)	PP reported that "the conservation Plan for schedule-I species for Amrapali OCP has been revised and re-submitted to DFO, Chatra South on 20.01.2021. Efforts are being undertaken to get the site conservation plan approved by competent authority". PP has submitted a copy of the letter dated 20.01.2021 addressed to DFO, Chatra(South).
<b>(a) Statutory Compliance</b>		
19	Compliance same as specific condition xi. (Condition v)	
20	Used oil drums were kept haphazardly without any cover/shade i.e in open space with some oil spilled on ground. (Condition vi)	<b>Complied.</b> Used oil drums were not observed in open space.
21	Project proponent(PP) should follow up and make efforts to get the site conservation plan approved by competent authority. Remaining compliance same as specific condition xxiv. (Condition iii)	PP reported that "the conservation Plan for schedule-I species for Amrapali OCP has been revised and re-submitted to DFO, Chatra South on 20.01.2021. Efforts are being undertaken to get the site conservation plan approved by competent authority".
<b>(b) Air quality monitoring and preservation</b>		



258

22	<p>Tarpauline covering was done on the coal transportation truck. However there was coal spillage on coal transportation routes. It may be due to improper covering, loading of coal till the top of truck, etc. It was instructed that a free board of minimum 5 cm in all loaded vehicles/trucks along with proper covering with impervious material to prevent escape of times should be followed for all coal transportation trucks. Some of fixed water sprinklers in line were not operational. Project authorities informed that due to pipe breakage some sprinklers were non operational. It was instructed to make arrangements so that water sprinklers remain operational regularly and it should be rectified as soon as some problems are encountered there. Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks more frequently.</p> <p>Grader/scrapper was used for leveling, clearing of road between Amrapali Mine project and Shivpur Railway siding. But coal dust/debris has been pushed on both sides of roads. Water tankers was observed sprinkling water on the coal transportation road to Amrapali siding but it did not seem sufficient. More water tankers should be deployed on the route for water sprinkling. Road sweeping machines can also be deployed. Steps should be taken to ensure that there is no coal spillage on the road because there were village dwellings/habitations adjacent to that road who would be adversely affected by the coal dust emissions there.</p> <p>Surface miner was observed in the mine that was utilised for coal breakage/excavation. However, coal dust emissions was observed during the operation of surface miner. Also during loading of coal by loaders into trucks there was a lot of coal dust emissions. Even though water tankers were utilized for wetting of coal there was coal dust emissions during coal loading. (Condition iii)</p>	<p><b>Partially complied.</b> Tarpauline covering was not observed on few coal transportation trucks carrying Coal between Amrapali Mine to Shivpur railway siding. One of such trucks was stopped and returned back with instructions for proper covering and then only transporting Coal (see photos 45 &amp; 46).</p> <p>Coal spillage observed on the coal transportation route.</p> <p>Coal dust emissions observed during operation of surface mines. During loading of coal /OB on trucks/dumpers dust emissions was observed.</p> <p>For coal dust emissions during operation of surface miner explained in latest EC (EC dated 10.05.2021) compliance status.</p>
23	<p>Fixed water sprinklers were installed at one of the coal stockpile/weighbridge area but few of those sprinklers were operational. Other fixed water sprinklers there were not operational. There were no fixed water sprinklers/rain gun, etc. at main coal dump, other weighbridges/coal stocks. (Condition vi)</p>	<p><b>Partially complied.</b> No fixed water sprinkling system observed in the mine project. Fixed water sprinklers found operational at Shivpur Railway siding.</p>
24	<p>Heavy metals monitoring data of Hg, Cd, Cr has not been submitted. Spontaneous combustion was observed at one place in O/B dump. It was instructed to eliminate spontaneous combustion in the mine project area. (Condition i &amp; ii)</p>	<p><b>Partially complied.</b> Spontaneous combustion was observed at few places in the O/B dump area (see photo 07.) It was instructed to take steps to eliminate spontaneous combustion in O/B dumps.</p> <p>Heavy metals monitoring data of As, Ni, Pb, Cu, Cd, Cr for December 2020, March 2021 and June 2021 quarter has been</p>



759

		submitted by Project proponent. Monitoring data of Hg has not been submitted. Level of Ni exceeds in December-2020 quarter at all 4 locations.
25	It is mentioned in the addendum EIA/EMP of Amrapali OCP( page no 11) that coal is being transported by trucks to Shivpur railway siding which is at a distance of 07 km from project boundary. However in the copy/pages of the mining plan submitted by PP there is no mention of coal transportation route nor any drawing/plate attached showing the route. (Condition iv)	PP has submitted copy of mining plan & mine closure plan of Amrapali expansion OCP (Phase-I) (25.00MTPA) proposed by CMPDI (Nov, 2020). The copy submitted has pages from no.1 to page no. 39 only. No plates drawings attached with the copy of mining plan.
<b>(c) Water quality monitoring and preservation</b>		
27	PP should submit the Effluent water monitoring data of workshop effluent. (Condition i)	Mine water effluent monitoring data of December 2020, March 2021 June 2021 and September 2021 quarter has been submitted by PP. Monitoring has been done by M/s CMPDIL. The parameters were found within limit. However, PP should submit the Effluent water monitoring data of workshop effluent.
28	Compliance same as specific condition xi. (Condition v)	
29	Action being taken for compliance but still partially complied. Overburden material was observed in the slopes facing Dhudhmata nala at many places. It was instructed to develop grassing and vegetation urgently on the slopes facing Dhudhmata nala. Catch drains were made adjacent to the coal dump in such a way that there was coal transportation road between coal dump and catch drains. Depth and width of catch drains near coal dump was not sufficient. Since there were no siltation ponds attached with those catch drains there were chances that coal dust water would flow to Dhudhmata nala adjacent to those drains. Also, there were open places between drains for vehicle movement and coal dust would flow from there to Dhudhmata nala. It was instructed to project authorities to make full proof arrangement, Catch drains of appropriate depth and width, siltation ponds etc. to ensure that no coal dust flows into the Dhudhmata nala. Catch drain and siltation pond was being constructed on one side of one of the coal dump on east side of mine pit . It was instructed to increase the depth of drains there and build siltation ponds also. At least four coal dumps/coal stockpile were observed in the project. Project authorities informed that the coal dump on the east side of mine pit would be discontinued very soon and no more coal would be stocked there. For the other coal stockpiles project authorities informed that due to weighbridge coal stocks accumulates and look like coal	<b>Partially complied.</b> Grassing and vegetation needs to be developed on the slopes facing Dudhmata nala. Kutcha drain and siltation ponds were made between Dudhmata nalah and haul road. Coal dump, O/B dump was adjacent to haul road (see photos 30,31,32). However the loose excavated material for making catch drains were placed there itself and they would flow into Dudhmata nala with rainwater. Grassing and vegetation on slopes facing Dudhmata nala needs to be developed. Catch drains, siltation ponds and retaining walls status around O/B dumps mentioned in latest report EC compliance status (i.e. EC dated 10.05.2020).



	<p>stockpile. It was instructed to construct catch drains and siltation ponds around these coal stocks/dumps also. Project authorities also showed catch drains around coal dumps on one of the weigh bridge . On the slopes from coal weighbridge area drains were constructed and connected to a newly constructed siltation pond. This was being done for preventing coal dust flow to downside in river Barki. However civil work was yet to complete there. Some gabions may be required there for complete control of coal dust/silt flow.</p> <p>Bingalat OB dump: Catch drains were observed on some portions of Bingalat O/B dump . However on some portions catch drains were not constructed. Siltation ponds were not constructed along with catch drains in the Bingalat O/B dump facing Bingalat village and Dhudhumatia nala. There were portions between Bingalat O/B dump and Dhudhmattia nala where catch drains siltation ponds and toe wall was not constructed and it was instructed to construct those urgently/immediately.</p> <p>Honhe OB dump: Catch drains and siltation ponds were observed around Honhe O/B dump . Retaining wall at the toe of the dump was observed on most part of the Honhe O/B dump . Around Bingalat O/B dump, retaining wall at the toe of the dump was observed on many portions except a few portions especially along the side facing Dhudhmattia nala . Catch drains and siltation pond adjacent to the Shivpur railway siding had been silted/filled with coal dust. Also some coal dust was observed beyond the siltation pond there which means there was leakage of coal dust into the surroundings . Toe wall was observed between top soil dump and Honhe O/B dump. However there was no Catch drains/ toe wall between top soil dump and O/B dump in the south side. (Condition vi)</p>	
30	<p>Oil and grease trap was observed in the project. However, it appeared that it was not utilised for washing of HEMM/trucks there. The oil and grease trap was too small for such a large project where many HEMM and trucks were operational. Also, discharge from oil and grease trap was released from two sides into a pit that was very close to Dhudhmattia nala. There was no mechanism for water recirculation after cleaning (after elimination of oil &amp; grease). Project authorities did not explain satisfactorily where they store the oil &amp; grease taken out of the trap and how much quantity of oil and grease was collected for last couple of months. Project proponent should submit the Effluent water monitoring data of workshop. (Condition viii)</p>	<p><b>Being complied but further action needed.</b> Washing platform and oil &amp; grease trap was observed in the project and it was functional(see Photo 67). Since Dhudhmattia nallah flows adjacent to this oil &amp; grease trap all steps/care should be taken that no water from the oil &amp; grease trap tanks flows into the nallah (see Photo 68).</p> <p>Mine water effluent monitoring data of December 2020, March 2021 June 2021 and September 2021 quarter has been submitted by Project Proponent. The parameters were found within limit. However, PP should submit the Effluent water monitoring data of workshop</p>



		effluent.
31	<p>A riverine/riparian ecosystem conservation and management plan has not been submitted by PP. Overburden material was observed in the slopes facing Dhudhmatia nala at many places. It was instructed to develop grassing and vegetation urgently on the slopes facing Dhudhmatia nala. Grassing and vegetation have been developed at many places on Bingalat O/B dump. However, there are still many places on the Bingalat O/B dump where grassing and vegetation has not been developed. Grassing and vegetation should be developed urgently on the sides/slopes of O/B dump facing Dhudhmatia nala and also on the remaining portions.</p> <p>Catch drains were made adjacent to the coal dump in such a way that there was coal transportation road between coal dump and catch drains. Depth and width of catch drains near coal dump was not sufficient. Since there were no siltation ponds attached with those catch drains there were chances that coal dust water would flow to Dhudhmatia nala adjacent to these drains. Also, there were open places between drains for vehicle movement and coal dust would flow from there to Dhudhmatia nala. It was instructed to project authorities to make full proof arrangement, Catch drains of appropriate depth and width, siltation ponds etc. to ensure that no coal dust flows into the Dhudhmatia nala. On the slopes from coal weighbridge area, drains were constructed and connected to a newly constructed siltation pond. This was being done for preventing coal dust flow to downside in river Barki. However civil work has not been completed yet. Some gabions may be required there for complete control of coal dust/silt flow. (Condition xi)</p>	<p><b>Partially complied.</b> First paragraph of compliance same as earlier report i.e. IRO Ranchi's report dated 13.01.2021).</p> <p>Kutchra drains and siltation ponds were made between Dudhmatia nallah and haul road.</p>
32	Environmental parameters were not displayed at suitable locations. (Condition ii)	<b>Being complied.</b> Digital display board displaying environmental parameters such as PM10, etc. was observed at Project office in the project (see photo 70).
<b>(d) Noise and Vibration monitoring and prevention</b>		
33	From the submitted data it is not clear whether the monitoring has been done at night or not. Total number of Ear plugs/Muffs provided in the year 2017, 2018, 2019 was not submitted by PP. (Condition i & iii)	Noise level monitoring data of December 2020, March 2021 June 2021 and September 2021 quarter has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. During day time noise level data ranges from 42.6 dB(A) to 69.2 dB(A) and at night noise level data ranges from 43.1 dB(A) to 62.3 dB(A). Project proponent has also submitted noise level monitoring data of Shivpur siding-1 and Shivpur siding-2 area. Monitoring has been done



		by M/s CMPDIL. During day time noise level data ranges from 54.6 dB(A) to 70.2 dB(A) and at night noise level data ranges from 45.8 dB(A) to 61.4 dB(A). Project proponent has submitted that total 87 ear muffs have been provided in the year 2020. However in the year 2021, 'Nil' ear muffs were provided.										
<b>(e) Mining Plan</b>												
34	Project proponent did not show any effects/process in the project done for reducing energy and fuel consumption & use of renewable energy. (Condition iii)	Partially complied. Compliance status same as earlier report. (i.e. IRO Ranchi's report dated 13.01.2021)										
35	In the backfilled area in the lower portion vehicles plied for various activities. However it was suggested that proper slope stability studies may be done so that there is no danger from dump failures/slope failures which may lead to risk to men and machinery. (Condition ii)	Project proponent has submitted a copy of slope stability studies for Amrapali OCP done by Prof. Amit Verma, Dept. of Mining Engineering, IIT-BHU in June 2021.										
<b>(f) Land Reclamation</b>												
36	Compliance same as specific condition xiv. (Condition v)											
37	PP should submit progressive compliance status vis-à-vis the post mining land use pattern as per this EC condition. (Condition iii)	Partially complied. Compliance status same as earlier report. (i.e. IRO Ranchi's report dated 13.01.2021)										
<b>(g) Green Belt</b>												
38	Greenbelt consisting of 3-tier plantation of width not less than 7.5 m has not been developed. Some Green belt has been developed along the major approach/coal transport roads. However, there remains many areas along the above roads where green belt has to be developed. (Condition ii)	Partially complied. Compliance status same as earlier report. (i.e. IRO Ranchi's report dated 13.01.2021).										
<b>(h) Public hearing and Human health issues</b>												
39	Project proponent has not submitted weekly illumination monitoring data. (Condition i)	Partially complied. Compliance status same as earlier report. (i.e. IRO Ranchi's report dated 13.01.2021)										
40	No details have been provided regarding training provided in the year 2018 and 2019. Project proponent should explain why only 41 dust masks were issued in the year 2019 and Nil dust masks were issued in the year 2016 and 2017. No details have been provided regarding training provided in the year 2018 and 2019. (Condition iii)	Project proponent has submitted that total 87 ear muffs have been provided in the year 2020. However in the year 2021, 'Nil' ear muffs were provided. Project proponent has submitted details of VTC training undertaken in past years, which is as follows: <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>S. No</th> <th>Training</th> <th>Year 2020</th> <th>Year 2019</th> <th>Year 2018</th> </tr> </thead> <tbody> <tr> <td></td> <td>Refresher VTC training</td> <td>63</td> <td>46</td> <td>13</td> </tr> </tbody> </table> Project proponent has also submitted	S. No	Training	Year 2020	Year 2019	Year 2018		Refresher VTC training	63	46	13
S. No	Training	Year 2020	Year 2019	Year 2018								
	Refresher VTC training	63	46	13								



263

		<p>training programme for the workers (Departmental &amp; Contractual), which is given below:</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Training</th> <th>Year 2020</th> <th>Year 2021</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>VTC</td> <td>222</td> <td>195</td> </tr> <tr> <td>2</td> <td>Refresher</td> <td>63</td> <td>Nil</td> </tr> <tr> <td>3</td> <td>Basic VT</td> <td>02</td> <td>29</td> </tr> </tbody> </table>	S. No	Training	Year 2020	Year 2021	1	VTC	222	195	2	Refresher	63	Nil	3	Basic VT	02	29
S. No	Training	Year 2020	Year 2021															
1	VTC	222	195															
2	Refresher	63	Nil															
3	Basic VT	02	29															
41	Project authorities should take concrete steps for controlling air and water pollution as committed in Public hearing. (Condition iv)	Partially complied. Compliance status same as earlier report. (i.e. IRO Ranchi's report dated 13.01.2021)																
<b>(i) Corporate Environment Responsibility</b>																		
42	Activity wise expenditure (on items related to CER) has not been submitted to this office. (Condition i)	Project proponent reported that a fund provision of Rs. 4.29 crore has been allocated for CER. PP submitted that allocations has been made for activities like Infrastructure development (Road, electricity, Drinking water etc), Skill Development and employment, Medical camp, Health & Hygiene, Education, Development of surface water bodies, Community plantation.																
43	In the environmental policy no details have been provided on standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/ conditions. Project authorities should also submit documents to prove that there exists system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/conditions and/or shareholders /stake holders. (Condition ii)	Compliance status same as earlier report (i.e. IRO Ranchi's earlier report dated 13.01.2021)																
44	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company (duly approved by competent authority) has not been submitted by project proponent. Expenditure data on environment protection measures and year wise progress of implementation of action plan should be submitted to IRO, Ranchi. (Condition iv)	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company (duly approved by competent authority) has not been submitted by project proponent. Project proponent in their mining proforma reported that Amount earmarked for Environment Management is 1220.04 cr. expenditure incurred on environment Management so far is 50.91 cr and expenditure incurred during the preceding year 38.24 cr.																
<b>(j) Miscellaneous</b>																		
45	Date of receipt of the EC letter by Mukhiya is not mentioned. (Condition ii)	Project proponent has submitted a copy of receipt of latest EC marked to Mukhiya-Pokla Panchayat and Up-Mukhiya Koed.																
46	Display of criteria pollutants or critical sectoral parameters not displayed at a convenient location for disclosure to public. (Condition iv)	Being complied. Digital display board displaying environmental parameters such as PM <sub>10</sub> , etc. was observed at Project																



	disclosure to public. (Condition iv)	as PM <sub>10</sub> , etc. was observed at Project office in the project (see photo 70).
<b>Following condition complied but timeline not followed.</b>		
47	The advertisement has been made in "Prabhat Khabar" and in "the pioneer" on 25.07.2020.(Condition i)	Compliance status same as earlier report.

Note: Photos mentioned above can be seen in Annexure I of this report.

*Rajeev Ranjan*  
03.12.21

(Rajeev Ranjan)  
Scientist 'E' / Additional Director



**Plantation Detail**

Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021.

- In Monsoon 2021, Plantation work in 23 Ha Backfilled area of 57500 plants completed by State Forest Department.
- About 4000 saplings of multi species planted/distributed during Vriksharopan abhiyan 2021 for development of Green Belt in and around the mine site.
- Approx 2600 species of drought hardy nature have been planted in 2020 at Binglat O/B dump.
- Around 25134 plants have been planted for raising of Green Belt / Block plantation.



- o In FY 2021-22 green belt along the NBCC road in two row with 1.5 m spacing in 4 km where out of the total length, work has been completed for 2.5 KM.



BISHWAMBHAR MAHTO  
NOTARY PUBLIC  
Reg. No. 12/2013-1864  
PHOTO COPY  
ATTESTED  
Ranchi, Jharkhand (India)



1. In Monsoon 2020, Seed ball plantation has been done for raising of Green belt in Binglat OB dump and for top soil preservation at stockyard near Honhe. Work is completed at Binglat OB dump area.



- 4 Ha of Area has been handed over to State Forest department for Sal plantation in Monsoon 2022.



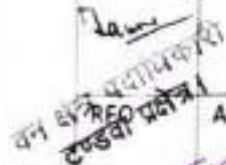
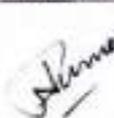
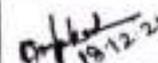
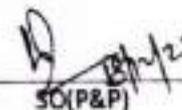
Letter No. 489 Date: - 27/10/21

2<sup>nd</sup> JOINT INSPECTIN REPORT

Name of work: Plantation work in different mines of CCL to be executed during 2021 monsoon by DFO, Chatra South Forest Division, Chatra  
 Work Order No:  
 Executing Agency: Chatra South Forest Division, Chatra  
 Report as on: Name of Project/Unit Amraiyali project ccl Area in Ha/Length in Km 23.0hae.

Sl. No.	Work is to be done as per W.O.				Actual work executed as per W.O.			Name of Species and Nos.			Remarks
	Name of Project/ Area	Area in Ha/ Length in Km	Type of Land	Nos. of sapling	Area in Ha/ Length in Km	Type of Land	Nos. of plants planted	Sl. No.	Name	Nos.	
	Amraiyali	23.0hae.	ORD	57,500	23.0hae.	ORD	57,500	1	Graham	7000	
								2	Salgwan	7000	
								3	Acacia	7000	
								4	Chakundi	7000	
								5	Keintree	7000	
								6	A. fechidiana	7000	
								7	Bamboo	7000	
								8	Khair	1500	
								9	Amalg	7000	
										57500	

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint inspection Report is base on the record maintained in the measurement book , site order book and hinderance register

 वन विभाग चतरा	अखिलेश कुमार वन परिसर पदाधिकारी चतरा (चतरा) 13/11/21	 Survey officer	 Project Engr. /Nodel Officer (P&P) /Env. Engr.	 Project Officer	18-12-2021  Area Env. Officer	 SO(P&P)	Countersigned Area GM/CGM
	ACF	Beet Officer					



899

letter no. - 489 Date: - 27-10-2021

2<sup>nd</sup> JOINT INSPECTIN REPORT

Name of work:  
Work Order No:  
Executing Agency:  
Report as on:

Plantation work in different mines of CCL to be executed during 2021 monsoon by DFO, Chatra South Forest Division, Chatra

Chatra South Forest Division, Chatra

Name of Project/Unit Amrapali Project CCL Area in Ha/Length in Km 23.0 Ha.

Sl. No.	Work is to be done as per W.O.			Actual work executed as per W.O.			Name of Species and Nos.			Remarks	
	Name of Project/ Area	Area in Ha/ Length in Km	Type of Land	Nos. of sapling	Area in Ha/ Length in Km	Type of Land	Nos. of plants planted	Sl. No.	Name		Nos.
	<u>Amrapali</u>	<u>23.0 Ha.</u>	<u>OB D</u>	<u>57,500</u>	<u>23.0 Ha.</u>	<u>OB D</u>	<u>57,500</u>	1.	<u>Gambhar.</u>	<u>7000-00</u>	
								2.	<u>Sagwan</u>	<u>7000-00</u>	
								3.	<u>Acacia</u>	<u>7000-00</u>	
								4.	<u>Chakundi</u>	<u>7000-00</u>	
								5.	<u>Raintree</u>	<u>7000-00</u>	
								6.	<u>A. Rechidiana</u>	<u>7000-00</u>	
								7.	<u>Bamboo</u>	<u>7000-00</u>	
								8.	<u>Khair</u>	<u>1500-00</u>	
								9.	<u>Amlo</u>	<u>7000-00</u>	
										<u>575000</u>	

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint inspection Report is base on the record maintained in the measurement book, site order book and hinderance register

<p>वन क्षेत्र प्रदाधिकारी एच.डी.ओ. (चट्टा)</p> <p>ACF</p>	<p>वन परिसर पदाधिकारी रणहवा (चट्टा)</p> <p>Beet Officer</p>	<p>सर्वेक्षण अधिकारी मिनिम</p> <p>Survey officer</p>	<p>प्रोजेक्ट इंजीनियर / नोडल ऑफिसर (P&amp;P) / एन्व. इंजीनियर</p> <p>Project Engr. /Nodel Officer (P&amp;P) /Env. Engr.</p>	<p>प्रोजेक्ट ऑफिसर</p> <p>Project Officer</p>	<p>एरिया एन्व. ऑफिसर</p> <p>Area Env. Officer</p>	<p>सो (P&amp;P) A-C Adar</p>	<p>काउंटरसिग्नेड एरिया GM/CGM</p> <p>Countersigned Area GM/CGM</p>
				<p>18-12-2021</p>	<p>18/12/21</p>	<p>18/12/21</p>	





**5<sup>th</sup> JOINT INSPECTIN REPORT**

Letter No. - 512      Date: - 18-11-2021

Name of work:  
Work Order No:  
Executing Agency:  
Report as on:

Plantation work in different mines of CCL to be executed during 2018 monsoon by DFO, Chatra South Forest Division, Chatra  
Chatra South Forest Division, Chatra  
Name of Project/Unit Amsrapali CCL Project Area in Ha/Length in Km 3.00 Ha.

Sl. No.	Work is to be done as per W.O.				Actual work executed as per W.O.			Name of Species and Nos.			Remarks Survival % as on Date
	Name of Project/ Area	Area in Ha/ Length in Km	Type of Land	Nos. of sapling	Area in Ha/ Length in Km	Type of Land	Nos. of plants planted	Sl. No.	Name	Nos.	
1.	Amsrapali	3.00 Ha	DB	7,500	3.00 Ha	DB	7,500	1.	Chakundi	3000	
								2.	Acacia	1500	
								3.	A. Reclutiana	2000	
								4.	Gramhat	1000	
								Total -		7500	

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint Inspection Report is base on the record maintained in the measurement book , site order book and hinderance register

<i>18/11/21</i> वन क्षेत्र प्रदायिका सूचना प्रवेक	<i>18/11/21</i> वन परिसर प्रदायिका सूचना	ACF	<i>18/11/21</i> Survey officer	<i>[Signature]</i> Project Engr. /Nodel Officer (P&P) /Env. Engr.	<i>[Signature]</i> Project Officer	<i>[Signature]</i> Area Env. Officer	<i>[Signature]</i> SO(P&P) A-C Aran	<i>[Signature]</i> Countersigned Area GM/CGM
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*[Handwritten mark]*

**5<sup>th</sup> JOINT INSPECTIN REPORT**

Letter No. 512 Date: - 18.11.2021

Name of work:  
Work Order No:  
Executing Agency:  
Report as on:

Plantation work in different mines of CCL to be executed during 2018 monsoon by DFO, Chatra South Forest Division, Chatra

Chatra South Forest Division, Chatra

Name of Project/Unit Amrapali CCL Project Area in Ha/Length in Km 3.00 Ha.

Sl. No.	Work is to be done as per W.O.				Actual work executed as per W.O.			Name of Species and Nos.			Remarks Survival % as on Date
	Name of Project/ Area	Area in Ha/ Length in Km	Type of Land	Nos. of sapling	Area in Ha/ Length in Km	Type of Land	Nos. of plants planted	Sl. No.	Name	Nos.	
1.	Amrapali	3.00 Ha.	OB	7,500	3.00 Ha.	OB	7,500	1.	Chakundi	3000	
								2.	Acacia	1500	
								3.	A. Rechiensis	2000	
								4.	Gambhar	1000	
										1	
									Total	7500	

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint inspection Report is base on the record maintined in the measurement book , site order book and hinderance register

<p>18/11/21</p> <p>परिसर पदाधिकारी (चारा)</p> <p>Beet Officer</p>	<p>ACF</p>	<p>18/11/21</p> <p>Survey officer</p>	<p>18/11/21</p> <p>Project Engr. /Nodel Officer (PAP) /Env. Engr.</p>	<p>18-12-2021</p> <p>Project Officer</p>	<p>18/12/21</p> <p>Area Env. Officer</p>	<p>SO(P&amp;P) A-C Area</p>	<p>Countersigned Area GM/CGM</p>
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(Signature)

**5<sup>th</sup> JOINT INSPECTIN REPORT**

Letter No. 512 Date: - 18-11-2021

Name of work:  
Work Order No:  
Executing Agency:  
Report as on:

Plantation work in different mines of CCL to be executed during 2018 monsoon by DFO, Chatra South Forest Division, Chatra

Chatra South Forest Division, Chatra

Name of Project/Unit Amrapali CCL Project Area in Ha/Length in Km 3.00 Ha.

Sl. No.	Work is to be done as per W.O.				Actual work executed as per W.O.			Name of Species and Nos.			Remarks Survival % as on Date
	Name of Project/ Area	Area in Ha/ Length in Km	Type of Land	Nos. of sapling	Area in Ha/ Length in Km	Type of Land	Nos. of plants planted	Sl. No.	Name	Nos.	
1.	Amrapali	3.00 Ha.	OBP	7,500	3.00 Ha.	OBP	7,500	1.	Chalcundi	3000	
								2.	Acacia	1500	
								3.	A. Rechiidiana	2000	
								4.	Gambhal	1000	
								Total =		7500	

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint inspection Report is base on the record maintained in the measurement book , site order book and hinderance register

<p>वन क्षेत्र पदाधिकारी परिसर पदाधिकारी चक्रवा प्रमुख Beet Officer ACF</p> <p>18/11/2021</p>	<p>Survey officer</p>	<p>Project Engr. /Nodel Officer (PdP) /Env. Engr.</p>	<p>Project Officer</p>	<p>Area Env. Officer</p>	<p>SO(P&amp;P) A-C Area</p>	<p>Countersigned Area GM/CGM</p>
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22/11/21

**4<sup>th</sup> JOINT INSPECTIN REPORT**

Letter No. 513 Date: - 18-11-2021

Name of work: Plantation work in different mines of CCL to be executed during 2019 monsoon by DFO, Chatra South Forest Division, Chatra  
 Work Order No:  
 Executing Agency: Chatra South Forest Division, Chatra  
 Report as on: Name of Project/Unit **AMRAPALI CCL** Area in Ha/Length in Km **1.00 Ha.**

Sl. No.	Work is to be done as per W.O.			Actual work executed as per W.O.			Name of Species and Nos.			Remarks Survival % as on Date	
	Name of Project/ Area	Area in Ha/ Length in Km	Type of Land	Nos. of sapling	Area in Ha/ Length in Km	Type of Land	Nos. of plants planted	Sl. No.	Name		Nos.
1.	Amrapali	1.00 Ha.	OBP	2500	1.00 Ha.	OBP	2500	1.	Acacia	500	
								2.	Chakundi	500	
								3.	Gramhar	500	
								4.	Bamboo	500	
								5.	A. Rakhidiang	500	
								Total =		2500	

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint inspection Report is base on the record maintained in the measurement book , site order book and hinderance register

18/11/21 वन क्षेत्र पदाधिकारी वन क्षेत्र प्रखेत्र। वन परिसर (चतरा) वन प्रदाधिकारी	18/11/21 वन प्रदाधिकारी	18/11/21 वन प्रदाधिकारी	18/11/21 वन प्रदाधिकारी	18/11/21 वन प्रदाधिकारी	18/11/21 वन प्रदाधिकारी	18/11/21 वन प्रदाधिकारी	18/11/21 वन प्रदाधिकारी	18/11/21 वन प्रदाधिकारी
Beet Officer	ACF	Survey officer	Project Engr. /Nodel Officer (P&P) /Env. Engr.	Project Officer	Area Env. Officer	SO(P&P) A-C M	Countersigned Area GM/CGM	



18/11/21

4<sup>th</sup> JOINT INSPECTIN REPORT

Letter No. 513 Date: 18-11-2021

Name of work: Plantation work in different mines of CCL to be executed during 2019 monsoon by DFO, Chatra South Forest Division, Chatra  
 Work Order No:  
 Executing Agency: Chatra South Forest Division, Chatra  
 Report as on: Name of Project/Unit Andrapali ccl Area in Ha/Length in Km 01.00 Ha.

Sl. No.	Work is to be done as per W.O.				Actual work executed as per W.O.			Name of Species and Nos.			Remarks
	Name of Project/ Area	Area in Ha/ Length in Km	Type of Land	Nos. of sapling	Area in Ha/ Length in Km	Type of Land	Nos. of plants planted	Sl. No.	Name	Nos.	Survival % as on Date
1.	Andrapali	1.00 Ha.	OB?	2500	1.00 Ha.	OB?	2500	1.	Acacia	500	
								2.	Chakundi	500	
								3.	Gambhal	500	
								4.	Bamboo	500	
								5.	A. Rechidiana	500	
								Total -		2500	

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint inspection Report is base on the record maintained in the measurement book , site order book and hinderance register

<p>वन क्षेत्र प्रदाधिकारी/परिसर प्रदाधिकारी                  वन क्षेत्र प्रदाधिकारी/परिसर प्रदाधिकारी                  वन क्षेत्र प्रदाधिकारी/परिसर प्रदाधिकारी</p>	<p>Beet Officer                  ACF</p>	<p>Survey officer</p>	<p>Project Engr.                  /Nodel Officer (P&amp;P)                  /Env. Engr.</p>	<p>Project Officer</p>	<p>Area Env. Officer</p>	<p>SO(P&amp;P)                  A-C Area</p>	<p>Countersigned Area GM/CGM</p>
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Handwritten initials 'JTC' in a circle.

**4<sup>th</sup> JOINT INSPECTIN REPORT**

Letter No - 513 Date: - 18-11-2021

Name of work: Plantation work in different mines of CCL to be executed during 2019 monsoon by DFO, Chatra South Forest Division, Chatra  
 Work Order No:  
 Executing Agency: Chatra South Forest Division, Chatra  
 Report as on: Name of Project/Unit **Amrapali ccl** Area in Ha/Length in Km **1.00 Ha.**

Sl. No.	Work is to be done as per W.O.			Actual work executed as per W.O.			Name of Species and Nos.			Remarks Survival % as on Date	
	Name of Project/ Area	Area in Ha/ Length in Km	Type of Land	Nos. of sapling	Area in Ha/ Length in Km	Type of Land	Nos. of plants planted	Sl. No.	Name		Nos.
1.	Amrapali	1.00 Ha.	OBP	2500	1.00 Ha.	OBP	2500	1.	Acacia	500	
								2.	Chalkundi	500	
								3.	Gambhar	500	
								4.	Bamboo	500	
								5.	A. Rehitiana	500	
								Total		2500	

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint inspection Report is base on the record maintined in the measurement book , site order book and hinderance register

नवन पदाधिकारी जय प्रसाद 18/11/2021 वन परिसर (काला) बरडका (काला)	Bee Officer ACF	Survey officer	Project Engr. /Nodel Officer (P&P) /Env. Engr.	Project Officer	Area Env. Officer	SO(P&P) A-C Ann	Countersigned Area GM/CGM
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9/25



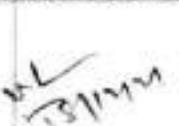
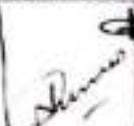
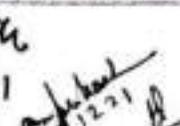
Letter No. 295 Date: - 22-07-2021

**1<sup>st</sup> JOINT INSPECTIN REPORT (Advance Work)**

Name of work: Plantation work in different mines of CCL to be executed during 2021 monsoon by DFO, Chatra South Forest Division, Chatra  
 Work Order No:  
 Executing Agency: Chatra South Forest Division, Chatra  
 Report as on: Name of Project/Unit: *Amarapali Project CCL Area in ha. : 23.0 ha.*

Sl. No.	Description of work	Requirement as per scheme	Actual Work Execute as per specification	Remarks
A	B	C	D	E
1	Site/Bush Cleaning		Bush Cleaning of site	Advance work Completed
2	Soil work (Pit Digging)	1'3" x 1'3" x 1'4" = 2 cft.	57,500 pits	Completed
3	Fencing			
	(a) Trench Fencing	1.75mt. X 1.25mt. x 1.25mt.		
	(b) Stone wall fencing	1.25mt. X 0.30mt. x 1.00mt.		
	(c) Total length	Chains		
4	Contour Tranches	Nos. (5mm x 0.3m x 0.3m at a distance of 2.3mt. & soil will kept down slope at 0.15mt. a part from contour trench by digging 0.15mt. Deep strip of size 0.30)	544 contours.	
5	Plant raising/ Nursery	Nos. of plants raised	69,000	
6	Pit digging and filling	Pit digging (nos.) filling with fertile soil and cow dung	57,500 pits filled out	Completed

1. Certified that the inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint Inspection Report is Base on the record maintained in the measurement book, site order book and hindrances register

 वन परिसर पदाधिकारी रणदबा (चक्रवा)	 ML 13/11/21	 M/21	 Preethi 18-12-2021	 S.O. (P&P) 12/21	Countersigned S/O 22/7/21
वन क्षेत्रीय पदाधिकारी रणदबा प्रकल्प	Survey officer	Project Engr. /Nodel Officer (P&P) /Env. Engr.	Project Officer	S.O. (P&P)/ Area Env. Engineer	Area GM/CGM



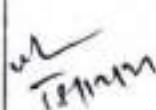
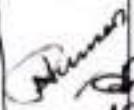
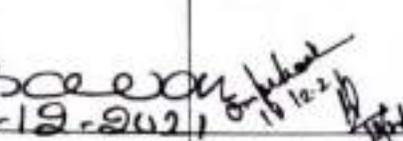
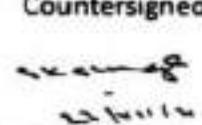
Letter No. 295 Date: - 22-07-2021

**1<sup>st</sup> JOINT INSPECTIN REPORT (Advance Work)**

Name of work: Plantation work in different mines of CCL to be executed during 2021 monsoon by DFO, Chatra South Forest Division, Chatra  
 Work Order No:  
 Executing Agency: Chatra South Forest Division, Chatra  
 Report as on. : Name of Project/Unit: *Amrapali Project CCL* Area in ha.: *23.0 ha.*

Sl. No.	Description of work	Requirement as per scheme	Actual Work Execute as per specification	Remarks
A	B	C	D	E
1	Site/Bush Cleaning		Bush Cleaning of site	Advance work Completed
2	Soil work (Pit Digging)	1'3" x 1'3" x 1'4" = 2 cft.	57,500 pits	Completed
3	Fencing			
	(a) Trench Fencing	1.75mt. X 1.25mt. x 1.25mt.		
	(b) Stone wall fencing	1.25mt. X 0.30mt. x 1.00mt.		
	(c) Total length	Chains		
4	Contour Tranches	Nos. (5mm x 0.3m x 0.3m at a distance of 2.3mt. & soil will kept down slope at 0.15mt. a part from contour trench by digging 0.15mt. Deep strip of size 0.30)	644 contours.	
5	Plant raising/ Nursery	Nos. of plants raised	69,000	
6	Pit digging and filling	Pit digging (nos.) filling with fertile soil and cow dung	57,500 pits filled out	Completed

1. Certified that the Inspection has been done as per the work Order, MOU and Guidelines issued by the HQ
2. Certified that the actual area planted has been verified by the project survey Department
3. Certified that the joint Inspection Report is Base on the record maintained in the measurement book , site order book and hindrances register

					Countersigned 
Beet Officer	Survey officer	Project Engr. / Nodel Officer (par) / Env. Engr.	Project Officer	S.O. (P&P)/ Area Env. Engineer	Area GM/CGM

वन क्षेत्र प्रमुख  
वन परिसर प्रदायक  
वन क्षेत्र प्रमुख  
वन क्षेत्र प्रमुख



6/25

**Photo graphs taken at the time of Inspection at Amrapali OCP on 4<sup>th</sup> Feb 2022**



*Figure 1 Present view of coal mining at Amrapali OCP using Surface miner , Payloader, dumper and no belt conveyor system*



*Figure 2 OCP Coal Mining using Surface miner, Payloader and Dumper/Hyva*



*Figure 3 Surface miner being used for coal cutting/ mining at Amrapali OCP*





*Figure 4 Coal transportation by dumpers/hyva and not by belt conveyor*



*Figure 5 Over loaded hyva a major cause of spillages from the over loaded vehicle*



*Figure 6 water spaying used for dust suppression*

BISHWANBHAR MAHTO  
NOTARY PUBLIC  
Reg. No. JAR/2018/1864  
PHOTO COPY  
ATTESTED  
Ranchi, Jharkhand, India



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



782

फाइल संख्या 103-557/आर.ओ.आर.-2020/4447(H)

दिनांक 13.01.2021

सेवा में

वैज्ञानिक 'ई' / अपर निदेशक (अनुवीक्षण सेल),  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,  
इंदिरा पर्यावरण भवन, जोर बाग रोड, अलीगंज,  
नई दिल्ली - 110003

विषय: आम्रपाली ओपेनकास्ट कोल-माईन प्रोजेक्ट, मेसर्स सेंट्रल कोलफिल्ड लिमिटेड के अनुश्रवण प्रतिवेदन (मॉनिटरिंग रिपोर्ट) के संबंध में।

संदर्भ: मंत्रालय का पर्यावरणीय क्लियरेंस पत्र सं. J-11015/109/2003-1A.II(M), तिथि 20/03/2020

महोदय/महोदया,

उपर्युक्त विषय के संबंध में कहना है कि दिनांक 21.12.2020 को आम्रपाली ओपेनकास्ट कोल माईन प्रोजेक्ट, मेसर्स सेंट्रल कोलफिल्ड लिमिटेड, जिला चतरा का अनुश्रवण एकीकृत क्षेत्रीय कार्यालय, रांची द्वारा किया गया। तदनुसार अनुश्रवण प्रतिवेदन एतद द्वारा आवश्यक कार्रवाई हेतु संलग्न है।

विश्वासभाजन,

राजीव रंजन  
13.01.21  
(राजीव रंजन)

वैज्ञानिक 'ई' / अपर निदेशक

प्रतिलिपि:-

1. वैज्ञानिक 'एफ', / निदेशक, आई. ए डिवाजन (कोल-माईनिंग), पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोरबाग रोड, अलीगंज, नई दिल्ली- 110003।
2. सदस्य सचिव, झारखण्ड राज्य प्रदूषण नियंत्रण पर्वट, टी. ए. डिवाजन भवन, एच. इ. सी. कैंपस पी. ओ. घुर्वा, रांची- 834004, झारखण्ड।
3. प्रोजेक्ट ऑफिसर, आम्रपाली ओपेनकास्ट प्रोजेक्ट, मेसर्स सेंट्रल कोलफिल्ड लिमिटेड, होन्हे, पोस्ट सराबु, जिला-चतरा, झारखण्ड-825321।
4. उप महाप्रबंधक पर्यावरण, मेसर्स सेंट्रल कोलफिल्ड लिमिटेड, दरभंगा हाउस, रांची, झारखण्ड-834001।

राजीव रंजन  
13.01.21  
(राजीव रंजन)

वैज्ञानिक 'ई' / अपर निदेशक

पता- बंगला नं - ए-2, श्यामली कॉलोनी, रांची- 834002  
Address - Bungalow No. A-2, Shyamli Colony, Ranchi - 834002





भारत सरकार / Government of India  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय  
Ministry of Environment, Forest & Climate Change  
एकीकृत क्षेत्रीय कार्यालय / Integrated Regional office  
Bungalow No.A-2, Shyamli Colony, Ranchi – 834002  
Tel: 0651-2410007, 2410002, E-mail: [ro.ranchi-mef@gov.in](mailto:ro.ranchi-mef@gov.in)



783

No.103-557/ROR-2020 / 4447

Dated: 13.01.2021

To,

Scientist 'E'/Additional Director,  
Monitoring Cell, IA division,  
Vayu Wing, 3<sup>rd</sup> Floor,  
Ministry of Environment, Forest and Climate Change,  
Indira Paryavaran Bhavan, Jorbagh Road,  
Aliganj, New Delhi-110003

(Kind attention: Dr. Shruti Rai Bharadwaj)

**Sub:** Site inspection/ Monitoring report of Amrapali Opencast Coal mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Ltd., located in Dist.: Chatra, Jharkhand.-reg.

**Ref:** Ministry's Clearance letter no. J-11015/109/2003-IA.II (M), dated 20/03/2020

Madam/Sir,

This is to inform that Amrapali Opencast Coal Mine Project of M/s Central Coalfields Ltd. located in District Chatra, Jharkhand was monitored by Integrated Regional Office, Ranchi on 21.12.2020 and the monitoring report is annexed herewith. Project proponent has informed that a proposal for expansion of the project is under consideration at MOEF&CC and requested for a certified compliance report from IRO Ranchi. The salient observations of the monitoring report are as follows:

**Specific Conditions:**

**Following conditions are partially complied:**

**Condition vi:** Some of fixed water sprinklers in line ( at the weighbridge area) were not operational. Project authorities informed that due to pipe breakage some sprinklers were non operational. It was instructed to make arrangements so that water sprinklers remain operational regularly and it should be rectified as soon as some problems are encountered there. Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks move frequently.

Grader/scrapper was used for levelling, cleaning of road between Amrapali Mine project and Shivpur Railway siding. But coal dust/debris has been pushed on both sides of roads. Water tanker was observed sprinkling water on the coal transportation road to Amrapali siding but it did not seem sufficient. More water tankers should be deployed on the route for water sprinkling. Road sweeping machines can also be deployed. Steps should be taken to ensure that there is no coal spillage on the road because there were village dwellings/habitations adjacent to that road who would be adversely affected by the coal dust emissions there. Project Proponent has submitted running hours of 3 departmental (3<sup>rd</sup> tanker operational since 11.08.2020) and 13 contractual water tankers. Average running hours of departmental water tankers were approximately 4-5 hr/day which is less than satisfactory. The running hours of contractual water tankers were approximately 4 hr/day, which is less than satisfactory. Project Proponent should ensure 3-4hr/ shift of water sprinkling per tanker especially in dry seasons.



784

**Condition ix:** Some green belt development could be seen in the project. However thick green belt of adequate width at the final boundary in the downward direction has not been developed yet by project authorities to mitigate/check the dust pollution.

**Condition x:** Water was withdrawn from Dhudhmata nala for water sprinkling in the project by water tankers. However, project authorities did not submit surface water / river water withdrawal permission from concerned department.

**Condition xi:** Groundwater was withdrawn for water utilization for water sprinkling, green belt development, etc. at the Shivpur railway siding area. However, project authorities did not submit any permission/approvals from competent authority (CGWA, etc.) for such Groundwater withdrawal there.

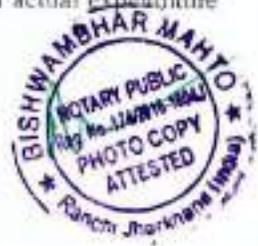
**Condition xiv:** Grassing and vegetation have been developed at many places on Bingalat O/B dump. However there are still many places on the Bingalat O/B dump where grassing and vegetation has not been developed. Grassing and vegetation should be developed urgently on the sides/slopes of O/B dump facing Dhudhmata nala and on remaining portions also.

**Condition xv:** Efforts made for compliance. Work in progress. Project proponent has submitted Action taken report dated 16.12.20. Efforts have been made for compliance of many EC (old) conditions. However, there still remains some partially complied conditions as given below:

- There has been some improvement in grassing and vegetation on O/B dumps but still there remains portion where grassing and vegetation have not been developed. There are two external dump in the project, Honhe O/B dump and Binglat O/B dump. Partially complied, work in progress (Specific condition iii of earlier EC).
- Catch drain and siltation ponds around Honhe dump has been made. However, catch drains and siltation pond (in the remaining portions) around Binglat O/B dump (especially adjacent to Dhudhmata nala) has to be made. Similarly Catch drains & siltation ponds around all coal dumps/heaps /stocks needs to be constructed-Partially complied. (Specific condition iv of earlier EC).
- Retaining wall made around Honhe O/B dump. Retaining wall around Binglat O/B dump especially facing Dhudhmata nala needs to be constructed- Being complied but further action needed. (Specific condition v of earlier EC).
- There have been improvements in green belt development. However, Avenue plantation on both side of haul road and green belt around bunker and surrounding area for coal stock has not been developed as per EIA/EMP report. Partially complied, efforts made for compliance but work in progress (Specific condition vi of earlier EC).
- Mitigative measures for preventing pollution in Dudhmata nala (that flows in river Barki) needs to be taken- Partially complied, action taken for compliance. (Specific condition xiii of earlier EC).
- Project proponent has submitted health check up report of around 5 K.M radius of Magadh Amrapali area for five years, from 2013-2018. Comparative analysis of the same has not been submitted by PP.
- Working hours of water tankers remain less than satisfactory. Fixed water should be provided for main haul roads dust suppression. Being complied but further action needed. (General condition vi of earlier EC).

**Condition xvi:** Action being taken for compliance but more efforts needed for compliance of this EC condition till March 2022. More plantations needs to be done along the villages and transportation route for compliance of this EC condition.

**Condition xvii:** Activity wise expenditure (on items related to CER) i.e. details of actual expenditure incurred on CER has not been submitted to this office.



**Condition xxvii:** As per the plan submitted, Honhe External OB dump is within 100m distance from Bahut Chuha nala. Catch drains and siltation ponds have been made around Honhe OB dump to prevent any silt flowing in Bahut Chuha nala.

**Condition xxviii:** Though efforts have been made for compliance of old EC conditions still there remains some conditions that are still partially complied. See specific condition xv for descriptive compliance status.

**Following conditions are being complied but further action needed:**

**Condition ii & (a) iv:** PP has also reported that copy of application made for CTE of 14.4 MTPA vide no: 7811934 dated 11.03.2020 has been submitted to JSPCB. It implies project proponent has neither received CTE for 14.4 MTPA (Peak) production nor they have valid CTO for 14.4 MTPA production till date.

**Condition iii:** Tarpaulin covering was done on the coal transportation trucks. However, there was coal spillage on coal transportation routes. It may be due to improper covering, loading of coal till the top of truck, etc. It was instructed that a free board of minimum 5 cm in all loaded vehicles/trucks along with proper covering with impervious material to prevent escape of times should be followed for all coal transportation trucks.

**Condition vii, xii, xxi & (h) ii:** PME of contractual workers should also be submitted.

**Condition viii:** Project proponent should submit skill development activities undertaken exclusively at Amrapali OCP.

**Condition xviii:** Project Proponent (PP) has submitted a copy of blasting permission obtained from DGMS (no.Ranchi area/825-27). Permission obtained was valid upto three years from the date of issue of letter but in the submitted copy date of issue of letter is not legible.

**Condition xxii, (h) v, (j) vi :** Some of the stipulations of the OM that are relevant to the project are yet to be complied completely: Inadequate provision for prevention of coal dust and OB silt material flow into Dhudhmata nala, Absence of permanent water sprinklers in main haulage road in mine, etc.

**Condition xxiii:** From the submitted data it is not clear whether the noise monitoring has been done at night or not.

**Condition xxiv & (g) i:** Project Proponent has submitted a copy of letter no. HOD(E&F)/20/1130 dated 18/02/2020 submitted to DFO, Chatra (South). In the submitted letter it was mentioned that application for EC has been made for 16.8 MTPA. However, in the preliminary conservation plan prepared by Institute of Forest Productivity, Ranchi targeted production of Amrapali OCP has been mentioned as 12.0 MTY. Project Proponent should clarify the above anomaly.

**(a) Statutory Compliance**

**Following conditions are partially complied:**

**Condition v:** Compliance same as specific condition xi.

**Condition vi:** Used oil drums were kept haphazardly without any cover/shade i.e in open space with some oil spilled on ground.

**Following conditions are being complied but further action needed:**

**Condition iii:** Project proponent(PP) should follow up and make efforts to get the site conservation plan approved by competent authority. Remaining compliance same as specific condition xxiv.



**(b) Air quality monitoring and preservation**

**Following conditions are partially complied:**

**Condition iii:** Tarpaulene covering was done on the coal transportation truck. However there was coal spillage on coal transportation routes. It may be due to improper covering, loading of coal till the top of truck, etc. It was instructed that a free board of minimum 5 cm in all loaded vehicles/trucks along with proper covering with impervious material to prevent escape of times should be followed for all coal transportation trucks. Some of fixed water sprinklers in line were not operational. Project authorities informed that due to pipe breakage some sprinklers were non operational. It was instructed to make arrangements so that water sprinklers remain operational regularly and it should be rectified as soon as some problems are encountered there. Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks more frequently.

Grader/scrapper was used for leveling, cleaning of road between Amrapali Mine project and Shivpur Railway siding. But coal dust/debris has been pushed on both sides of roads. Water tankers was observed sprinkling water on the coal transportation road to Amrapali siding but it did not seem sufficient. More water tankers should be deployed on the route for water sprinkling. Road sweeping machines can also be deployed. Steps should be taken to ensure that there is no coal spillage on the road because there were village dwellings/habitations adjacent to that road who would be adversely affected by the coal dust emissions there.

Surface miner was observed in the mine that was utilised for coal breakage/excavation. However, coal dust emissions was observed during the operation of surface miner. Also during loading of coal by loaders into trucks there was a lot of coal dust emissions. Even though water tankers were utilized for wetting of coal there was coal dust emissions during coal loading.

**Condition vi:** Fixed water sprinklers were installed at one of the coal stockpile/weighbridge area but few of those sprinklers wee operational. Other fixed water sprinklers there were not operational. There were no fixed water sprinklers/rain gun, etc. at main coal dump, other weighbridges/coal stocks.

**Following conditions are being complied but further action needed:**

**Condition i & ii:** Heavy metals monitoring data of Hg, Cd, Cr has not been submitted. Spontaneous combustion was observed at one place in O/B dump. It was instructed to eliminate spontaneous combustion in the mine project area.

**Condition iv:** It is mentioned in the addendum EIA/EMP of Amrapali OCP( page no 11) that coal is being transported by trucks to Shivpur railway siding which is at a distance of 07 km from project boundary. However in the copy/pages of the mining plan submitted by PP there is no mention of coal transportation route nor any drawing/plate attached showing the route.

**(c) Water quality monitoring and preservation**

**Following conditions are partially complied:**

**Condition ii:** PP should submit the Effluent water monitoring data of workshop effluent.

**Condition v:** Compliance same as specific condition xi.

**Condition vi:** Action being taken for compliance but still partially complied. Overburden material was observed in the slopes facing Dhudhmatia nala at many places. It was instructed to develop grassing and vegetation urgently on the slopes facing Dhudhmatia nala. Catch drains were made adjacent to the coal dump in such a way that there was coal transportation road between coal dump and catch drains. Depth and width of catch drains near coal dump was not sufficient. Since there were no siltation ponds attached with those catch drains there were chances that coal dust would



to Dhudhmata nala adjacent to those drains. Also, there were open places between drains for vehicle movement and coal dust would flow from there to Dhudhmata nala. It was instructed to project authorities to make full proof arrangement, Catch drains of appropriate depth and width, siltation ponds etc. to ensure that no coal dust flows into the Dhudhmata nala. Catch drain and siltation pond was being constructed on one side of one of the coal dump on east side of mine pit . It was instructed to increase the depth of drains there and build siltation ponds also. At least four coal dumps/coal stockpile were observed in the project. Project authorities informed that the coal dump on the east side of mine pit would be discontinued very soon and no more coal would be stocked there. For the other coal stockpiles project authorities informed that due to weighbridge coal stocks accumulates and look like coal stockpile. It was instructed to construct catch drains and siltation ponds around these coal stocks/dumps also. Project authorities also showed catch drains around coal dumps on one of the weigh bridge . On the slopes from coal weighbridge area drains were constructed and connected to a newly constructed siltation pond. This was being done for preventing coal dust flow to downside in river Barki. However civil work was yet to complete there. Some gabions may be required there for complete control of coal dust/silt flow.

Bingalat OB dump: Catch drains were observed on some portions of Bingalat O/B dump . However on some portions catch drains were not constructed. Siltation ponds were not constructed along with catch drains in the Bingalat O/B dump facing Bingalat village and Dhudhmata nala. There were portions between Bingalat O/B dump and Dhudhmata nala where catch drains siltation ponds and toe wall was not constructed and it was instructed to construct those urgently/immediately.

Honhe OB dump: Catch drains and siltation ponds were observed around Honhe O/B dump . Retaining wall at the toe of the dump was observed on most part of the Honhe O/B dump . Around Bingalat O/B dump, retaining wall at the toe of the dump was observed on many portions except a few portions especially along the side facing Dhudhmata nala . Catch drains and siltation pond adjacent to the Shivpur railway siding had been silted/filled with coal dust. Also some coal dust was observed beyond the siltation pond there which means there was leakage of coal dust into the surroundings . Toe wall was observed between top soil dump and Honhe O/B dump. However there was no Catch drains/ toe wall between top soil dump and O/B dump in the south side.

**Condition viii:** Oil and grease trap was observed in the project. However, it appeared that it was not utilised for washing of HEMM/trucks there. The oil and grease trap was too small for such a large project where many HEMM and trucks were operational. Also, discharge from oil and grease trap was released from two sides into a pit that was very close to Dhudhmata nala. There was no mechanism for water recirculation after cleaning (after elimination of oil & grease). Project authorities did not explain satisfactorily where they store the oil & grease taken out of the trap and how much quantity of oil and grease was collected for last couple of months. Project proponent should submit the Effluent water monitoring data of workshop.

**Condition xi:** A riverine/riparian ecosystem conservation and management plan has not been submitted by PP. Overburden material was observed in the slopes facing Dhudhmata nala at many places. It was instructed to develop grassing and vegetation urgently on the slopes facing Dhudhmata nala. Grassing and vegetation have been developed at many places on Bingalat O/B dump. However, there are still many places on the Bingalat O/B dump where grassing and vegetation has not been developed. Grassing and vegetation should be developed urgently on the sides/slopes of O/B dump facing Dhudhmata nala and also on the remaining portions.

Catch drains were made adjacent to the coal dump in such a way that there was coal transportation road between coal dump and catch drains. Depth and width of catch drains near coal dump was not sufficient. Since there were no siltation ponds attached with those catch drains there were chances that coal dust water would flow to Dhudhmata nala adjacent to those drains. Also, there were open places



between drains for vehicle movement and coal dust would flow from there to Dhudhmata nala. It was instructed to project authorities to make full proof arrangement, Catch drains of appropriate depth and width, siltation ponds etc. to ensure that no coal dust flows into the Dhudhmata nala. On the slopes from coal weighbridge area, drains were constructed and connected to a newly constructed siltation pond. This was being done for preventing coal dust flow to downside in river Barki. However civil work has not been completed yet. Some gabions may be required there for complete control of coal dust/silt flow.

**Following conditions are being complied but further action needed:**

**Condition ii:** Environmental parameters were not displayed at suitable locations.

**(d) Noise and Vibration monitoring and prevention**

**Following conditions are being complied but further action needed:**

**Condition i & iii:** From the submitted data it is not clear whether the monitoring has been done at night or not. Total number of Ear plugs/Muffs provided in the year 2017, 2018, 2019 was not submitted by PP.

**(e) Mining Plan**

**Following conditions are partially complied:**

**Condition iii:** Project proponent did not show any effects/process in the project done for reducing energy and fuel consumption & use of renewable energy.

**Following conditions are being complied but further action needed:**

**Condition ii:** In the backfilled area in the lower portion vehicles plied for various activities. However it was suggested that proper slope stability studies may be done so that there is no danger from dump failures/slope failures which may lead to risk to men and machinery.

**(f) Land Reclamation**

**Following conditions are partially complied:**

**Condition vi:** Compliance same as specific condition xiv.

**Following condition is assured to comply but further action needed:**

**Condition iii:** PP should submit progressive compliance status vis-à-vis the post mining land use pattern as per this EC condition.

**(g) Green Belt**

**Following conditions are partially complied:**

**Condition ii:** Greenbelt consisting of 3-tier plantation of width not less than 7.5 m has not been developed. Some Green belt has been developed along the major approach/coal transport roads. However, there remains many areas along the above roads where green belt has to be developed.

**(h) Public hearing and Human health issues**

**Following conditions are partially complied:**

**Condition i:** Project proponent has not submitted weekly illumination monitoring data.

**Following conditions are being complied but further action needed:**

**Condition iii:** No details have been provided regarding training provided in the year 2018 and 2019. Project proponent should explain why only 41 dust masks were issued in the year 2019 and Nil dust masks were issued in the year 2016 and 2017. No details have been provided regarding training provided in the year 2018 and 2019.

**Condition iv:** Project authorities should take concrete steps for controlling air and noise pollution committed in Public hearing.



## (i) Corporate Environment Responsibility

Following conditions are partially complied:

**Condition i:** Activity wise expenditure (on items related to CER) has not been submitted to this office.

**Condition ii:** In the environmental policy no details have been provided on standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/ conditions. Project authorities should also submit documents to prove that there exists system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/conditions and/or shareholders /stake holders.

**Condition iv:** Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company (duly approved by competent authority) has not been submitted by project proponent. Expenditure data on environment protection measures and year wise progress of implementation of action plan should be submitted to IRO, Ranchi.

## (j) Miscellaneous

Following conditions are being complied but further action needed:

**Condition ii:** Date of receipt of the EC letter by Mukhya is not mentioned.

**Condition iv:** Display of criteria pollutants or critical sectoral parameters not displayed at a convenient location for disclosure to public.

Following condition complied but timeline not followed.

**Condition i:** The advertisement has been made in "Prabhat Khabar" and in "the pioneer" on 25.07.2020.

This issues with the approval of DDGF(C) and Regional Officer, IRO Ranchi.

Yours faithfully,

Encl: As above

(Rajeev Ranjan)

Scientist 'E'/ Additional Director

Copy to:

- ✓ 1. Scientist 'F'/Director, Impact Assessment Division (Coal Mining), (Kind attention: Shri Lalit Kumar Bokolia), Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
2. The Member Secretary, JSPCB, T.A Division Building, HEC campus Dhurwa, Ranchi-834004.
3. Project Officer, Amarpali OCP, M/s Central Coalfields Ltd., at Honhe & Post Saradu, Tandwa, Dist- Chatra, Jharkhand-825321. (Reply/action taken report to the above points must be submitted to RO Ranchi within 15 days of receipt of this letter).
4. Deputy General Manager & HOD (Environment), M/s Central Coalfields Ltd., Darbhanga House, Ranchi, Jharkhand-834001.

*Rajeev Ranjan*  
13.03.21  
(Rajeev Ranjan)

Scientist 'E'/ Additional Director



MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE  
INTEGRATED REGIONAL OFFICE, RANCHI  
MONITORING REPORT

Part -I, Data Sheet

1. Project type	Mining (Coal Mining)		
2. Name of the Project			
3. No & date of Environment Clearance	EC- 11015/109/2003-IA.II(M) dated 20/03/2020		
4. Locations: District & State	Chatra, Jharkhand		
5. Address of correspondence	Project Officer At Honhe & Post- Saradu, Tandwa District-Chatra; Pin- 825321		
6. Salient features			
(a) Of the project	As per the EC "At present coal is being transported through Shivpur railway siding. A new railway siding, Amrapali siding adjacent to the mine boundary is under commissioning. In future, it is proposed to dispatch coal through Amrapali railway siding. Total number of permanent & temporary employment is approximately 650. The method of mining would be opencast method of mining with Surface miner and shovel-dumper combination. The balance life of mine is 9 years. Total cost of the project is Rs. 85,811 Lakhs". Surface miner and shovel dumper combination was deployed for opencast mining. Coal is transported with the help of trucks from project to Shivpur Railway siding.		
(b) Of the EMP	AS per EC "Total Quarry area is 425.22 Ha. The final mine void would be in 153.50 Ha with depth an average up to 90 m below GL. Backfilled quarry area of 271.71 Ha shall be reclaimed with plantation. Final mine voids will be converted into water body. Transportation of coal has been proposed by dumper from mine pithead, from surface to siding by tipping trucks. Reclamation plan in an area of 379.25Ha, comprising of 89.16 Ha of external dump, 277.71 Ha of internal dump and 18.92 ha of green belt & safety zone. No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project. The ground water level has been reported to be varying between 6.50 m to 10 m during pre-monsoon and between 0.95 m to 6.50 m during post-monsoon. Total water requirement for the project is 3357 KLD. The project involves 452 project-affected families. R&R of the PAPs will be done as per R&R Policy of CIL. Environment Management Cost is approximately Rs. 89,00 lakhs".		
7. Project area	<b>Forest (ha)</b>	<b>Non-Forest (ha)</b>	<b>Total (ha)</b>
	531.64 ha (as per EC)	88.23 ha (as per EC)	619.87 ha (as per EC)



8. Break-up of project effected population, with enumeration of those, no. of housing or dwelling have been affected losing houses/dwelling units only, Agriculture land and less Labourers/artisans.	As per the data submitted by PP "452 Project Affected Family (PAF) are identified who are to be provided R&R benefit with the progress of mine in phased manner. Detailed assessment of the families as required is yet to be computed".
9. Project Cost /financial details	<b>Parameters/ Amount</b>
a. Project cost as originally planned and subsequent revised estimates and the years of price reference	Project Cost as per EC is Rs. 858.11 Crs. As per PP "No subsequent revised estimates done."
b. Allocations made for environmental management plans, with item wise and year wise breakup	Data not provided by PP.
c. Total expenditure on the project so far	As per P.P "Initial capital outlay- Rs 496.81 Crores"
d. Actual expenditure incurred on the environmental management plans so far	Data submitted by PP in proforma seems erroneous.
10. Forest land requirement:	
a. The status of approval for and Diversion of forest land for Non-forestry use	FC Vide FL-08/48/2008/FC Dated 12.10.2010 for 531.64.
b. The status of compensatory afforestation	As per PP "The total payment of Rs. 48,74,87,771/- has already been deposited to state forest department for compensatory afforestation".
c. The status of clear felling	As per P.P this is 'Nil'
d. Comments on the viability & Sustainability of Compensatory Afforestation programme in the Light of actual field experience so far.	As per P.P "To be carried out Forest Department"
11. The status of clear felling in non -forest area (such as submergence area of Reservoir approach roads) if any with Quantitative information.	As per P.P this is "Not applicable".
12 Status of construction of project	
a) Date of commencement	As per PP "7 February, 2009"
b) Date of completion	As per PP "Project is yet to be completed".
13. Date of site visits	
(a) Date of present visit	21.12.2020



**PART - II**

Descriptive Report on status of compliance to conditions of environmental clearance.

1	Name of the project	Amrapali Opencast Coal mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Ltd., located in Dist.: Chatra, Jharkhand.
2	No & date of environmental clearance	EC- J-11015/109/2003-IA.II (M) dated 20/03/2020
3	Address for correspondence	
	(a) Registered Office	Project Officer, Amrapali OCP, M/s Central Coalfields Ltd., Dist. Chatra, Jharkhand-825321
4	Date of site visit:	
	Date of site visit by IRO Ranchi, MOEF&CC	21.12.2020

The project was visited on 21.12.2020 along with the representatives of Project. Based on the site visit, documents provided and discussion held with project officials, status of compliance of various environmental clearance conditions, is as follows:

**Specific Condition**

SN	Specific Condition	Compliance
i	EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.	<b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "The project assures to comply with conditions stipulated in EC/FC/CTO in a time-bound manner. The status of compliance & cost incurred is being submitted with six monthly compliance report to MoEF&CC & JSPCB periodically". Project proponent (PP) has submitted OM No. 43012-10-2019-CPAM dated 11/06/2019 issued by Ministry of Coal (MoC), regarding constitution of an apex committee under chairmanship of Additional Secretary, MoC to monitor the compliance of EC and FC conditions in coal mines. PP has also submitted letter no. CCL/HOD (E&Fy2019/348 dated 26.07.19 in which it is mentioned that a committee was constituted under the chairmanship of Area General Manager to review EC/FC compliance periodically, etc.
ii	The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 14.4 MTPA (Peak) prior to commencement of the increased production	<b>Being complied but further action needed.</b> Project proponent has submitted a copy of Consent to Operate obtained from Jharkhand State Pollution Control Board (JSPCB) for 14.4 MTPA issued vide Ref No: JSPCB/HO/RNC/CTO-7819614/2020/712 Dated: 26.03.2020 which was valid up to 30.04.2020. Later JSPCB vide letter no: B-100 Dated: 31.08.2020 extended the validity of the consent to operate till 30.09.2020. Project proponent has also submitted a copy of Consent to Operate obtained from JSPCB for 12



		<p>MTPA issued vide Ref No: JSPCB/HO/RNC/ CTO-6645615/2020/1408 Dated: 01.09.2020, which is valid up to 30.06.2021.</p> <p>PP has also reported that copy of application made for CTE of 14.4 MTPA vide no: 7811934 dated 11.03.2020 has been submitted to JSPCB. It implies project proponent has neither received CTE for 14.4 MTPA (Peak) production nor they have valid CTO for 14.4 MTPA production till date.</p>
iii	Transportation of coal from Coal Handling Plant shall be through covered trucks.	<p><b>Being complied but further action needed.</b> Project authorities have mentioned in their six monthly compliance report that "The transportation of coal from mines is being done through covered trucks". Tarpaulin covering was done on the coal transportation trucks (see photo 18). However there was coal spillage on coal transportation routes. It may be due to improper covering, loading of coal till the top of truck, etc. It was instructed that a free board of minimum 5 cm in all loaded vehicles/trucks along with proper covering with impervious material to prevent escape of times should be followed for all coal transportation trucks.</p>
iv	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.	<p><b>Assured to comply.</b> Project authorities have mentioned in their six monthly compliance report that "The condition shall be complied when construction of crusher and in-pit belt conveyors will be completed".</p>
v	PP shall implement in pit conveyor to railway siding through silo loading in three years.	<p><b>Assured to comply.</b> Project authorities have mentioned in their six monthly compliance report that "The tender for Amrapali CHP (12 MTY) has been floated on 06.05.2020. The project is under construction phase and shall be completed in the stipulated timeline".</p>
vi	Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.	<p><b>Partially complied.</b> Few fixed water sprinklers were operational for some part in the one of weighbridge/coal stock area (South of the pit) (see photo 22). However, some of fixed water sprinklers in line were not operational (see photo 22). Project authorities informed that due to pipe breakage some sprinklers were non operational. It was instructed to make arrangements so that water sprinklers remain operational regularly and it should be rectified as soon as some problems are encountered there. Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks move frequently.</p> <p>Grader/scrapper was used for leveling, cleaning of road between Amrapali Mine project and Shivpur</p>



		<p>Railway siding (see photo 43). But coal dust/debris has been pushed on both sides of roads (see photos 42, 45, 54 &amp; 55).</p> <p>Water tankers was observed sprinkling water on the coal transportation road to Amrapali siding but it did not seem sufficient. More water tankers should be deployed on the route for water sprinkling. Road sweeping machines can also be deployed. Steps should be taken to ensure that there is no coal spillage on the road because there were village dwellings/habitations adjacent to that road who would be adversely affected by the coal dust emissions there.</p> <p>Project Proponent has submitted running hours of 3 departmental (3<sup>rd</sup> tanker since 11.08.2020) and 13 contractual water tankers. Average running hours of departmental water tankers were approximately 4-5 hr/day which is less than satisfactory. The running hours of contractual water tankers were approximately 4 hr/day, which is less than satisfactory. Project Proponent should ensure 3-4hr/ shift of water sprinkling per tanker especially in dry seasons.</p>																												
vii	<p>Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.</p>	<p>Being complied but further action needed. Project authorities have mentioned in their six monthly compliance report that "Continuous monitoring of occupational safety and other health hazards is being undertaken. Initial Medical Examination (IME) &amp; Periodic Medical Examination(PME) of workers is being carried out. The details of IME/PME is given below:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>IME departmental</th> <th>IME Contractual</th> <th>PME</th> </tr> </thead> <tbody> <tr> <td>2015</td> <td>122</td> <td>210</td> <td>11</td> </tr> <tr> <td>2016</td> <td>15</td> <td>47</td> <td>21</td> </tr> <tr> <td>2017</td> <td>21</td> <td>126</td> <td>21</td> </tr> <tr> <td>2018</td> <td>11</td> <td>384</td> <td>26</td> </tr> <tr> <td>2019</td> <td>07</td> <td>192</td> <td>78</td> </tr> <tr> <td>2020</td> <td>01</td> <td>105</td> <td>53</td> </tr> </tbody> </table> <p>PME of contractual workers should also be submitted.</p>	Year	IME departmental	IME Contractual	PME	2015	122	210	11	2016	15	47	21	2017	21	126	21	2018	11	384	26	2019	07	192	78	2020	01	105	53
Year	IME departmental	IME Contractual	PME																											
2015	122	210	11																											
2016	15	47	21																											
2017	21	126	21																											
2018	11	384	26																											
2019	07	192	78																											
2020	01	105	53																											
viii	<p>Persons of nearby villages shall be given training on livelihood and skill development to make them employable.</p>	<p>Being complied but further action needed: Project authorities have mentioned in their six monthly compliance report that "The training on livelihood and skill development is regularly been undertaken in CCL &amp; Amrapali area for making nearby villagers more employable. The details of such training undertaken are enclosed". Skill development activities and expenditure details of the year 2016-17, 2017-18 and 2018-19 has been submitted. Project proponent has not submitted skill development activities and expenditure details of the year 2019-20 and 2020-21 (Up to December 2020).</p>																												



ix	Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.	<b>Partially complied.</b> Project authorities have mentioned in their six monthly compliance report that "Around 25,134 plants have been planted for raising of Green Belt / Block plantation". <b>Some green belt development could be seen in the project. However thick green belt of adequate width at the final boundary in the downward direction has not been developed yet by project authorities to mitigate/check the dust pollution.</b>
x	Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.	<b>Partially complied:</b> Project authorities have mentioned in their six monthly compliance report that "For mining purposes, water stored in mining pits is utilized. For drinking purpose water from dugwell is being utilized". <b>Water was withdrawn from Dhudhmatia nala for water sprinkling in the project by water tankers (see photo 09). However project authorities did not submit surface water / river water withdrawal permission from concerned department.</b>
xi	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 14.4 MTPA (Peak).	<b>Partially complied:</b> Project authorities have mentioned in their six monthly compliance report that "Amrapali OCP falls in Chatra District, which falls in "Safe" category as per CGWA categorization. Application for obtaining NoC was made earlier to Central Ground Water Authority for taking NOC vide ref no:-21-4/328/JH/MIN/2018 dated 29.12.2018. The application was approved by the Regional Office of Central Ground Water Board Mid Eastern Region and was under processing of issuance of final issuance of NoC. A fresh application was submitted as per the Ministry of Jal Shakti Notification S.O. No: 3289(E) Dated: 24.09.2020 vide application No: 21-4/699/JH/MIN/2020 Dated: 29.11.2020 for Amrapali Expansion OCP. The application is under consideration at CGWA office". <b>Groundwater was withdrawn for water utilization for water sprinkling, green belt development, etc. at the Shivpur railway siding area. However project authorities did not submit any permission/approvals from competent authority (CGWA, etc.) for such Groundwater withdrawal.</b>
xii	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	<b>Compliance same as in specific condition vii.</b>
xiii	A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.	<b>Assured to comply.</b> Project authorities have mentioned in their six monthly compliance report that "As directed, a third party assessment shall be carried out for Amrapali OCP undertaken once in three years through experts agency recognized by MoEF&CC."
xiv	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of	<b>Partially complied.</b> Grassing and vegetation have been developed at many places on Bingalat O/B dump (see photos 06 & 30). However there are still



particles	many places on the Bingalat O/B dump where grassing and vegetation has not been developed (see photos 26, 27, 28 & 30). Grassing and vegetation should be developed urgently on the sides/slopes of O/B dump facing Dhudhmatia nala (see photos 26 & 27) and on remaining portions also.
<p>Compliance of the non-compliance/partial compliance conditions certified by Regional Office, Ranchi vide its Letter dated 4<sup>th</sup> December, 2019. The PP shall complete all non-compliance/partial compliance conditions in one year and the Action taken report shall be submitted to the Regional Office of the MoEF&amp;CC.</p> <p>xv</p>	<p>Partially complied. Efforts made for compliance. Work in progress. Project proponent has submitted Action taken report dated 16.12.20. Efforts have been made for compliance of many EC (old) conditions. However, there still remains some partially complied conditions as given below:</p> <p>a) There has been some improvement in grassing and vegetation on O/B dumps but still there remains portion where grassing and vegetation have not been developed. There are two external dump in the project, Honhe O/B dump and Binglat O/B dump. Partially complied, work in progress (Specific condition iii of earlier EC)</p> <p>b) Catch drain and siltation ponds around Honhe dump has been made. However, catch drains and siltation pond (in the remaining portions) around Binglat O/B dump has to be made. Similarly Catch drains &amp; siltation ponds around all coal dumps/ heaps /stocks needs to be constructed- Partially complied. (Specific condition iv of earlier EC)</p> <p>c) Retaining wall made around Honhe O/B dump. Retaining wall around Binglat O/B dump especially facing Dhudhmatia nala needs to be constructed- Being complied but further action needed. (Specific condition v of earlier EC)</p> <p>d) There have been improvements in green belt development. Avenue plantation on both side of haul road and green belt around bunker and surrounding area for coal stock has not been developed as per EIA/EMP report: Partially complied, efforts made for compliance but work in progress (Specific condition vi of earlier EC)</p> <p>e) However mitigative measures for preventing pollution in Dudhmatia nala (that flows in river Barki) needs to be taken- Partially complied, action taken for compliance. (Specific condition xiii of earlier EC)</p> <p>f) Project proponent has submitted health check up report of around 5 K.M radius of Magadh Amrapali area for five years, from 2013-2018. Comparative analysis of the same has not been submitted by PP.</p> <p>g) Working hours of water tankers remain less than satisfactory. Fixed water should be provided</p>



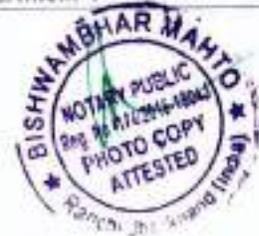
		for main haul roads for dust suppression. Being complied but further action needed. (General condition vi of earlier EC).
xvi	Project proponent to plant 1,00,000 nos. of native trees with broad leaves along the 100,000 nos. of native trees with broad leaves along the villages and 50,000 nos of native trees along transportation route to prevent the effect of air pollution in 2 years. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.	<p><b>Partially complied. Action being taken for compliance but more efforts needed for compliance of this EC condition till March 2022.</b> Project authorities have mentioned in their six monthly compliance report that "in Monsoon 2016, as per the MOU for raising of green belt between CCL and State Forest department work awarded vide no:-CCL/Dy.GM(Forest)/GA/W.O/16-Plantation/Chatra South/2016/67 dated 23.05.16, 1200 numbers of native species have been planted along the NBCC road of Amrapali OCP in 3 Km of length. In 2018, 1000 numbers of native species in consultation with Range Forest Officer, Simariya, Jharkhand have been planted near Ambey&amp;Mahalaxmi camp in Amrapali Project. (ii)Fruit bearing Plants of 150 numbers have been planted in at Govt. School Honhe&amp; St. Joseph School Mander.</p> <p>Plantation of 850 numbers of native species along the Haul road of Amrapali project to check the fugitive dust have been done departmentally in 2018 in consultation with State Forest Department. In Monsoon 2019, 934 nos. of drought hardy native species have been planted departmentally at different locations of Amrapali Project.</p> <p>As per MOU for Monsoon plantation 2020, work awarded vide no: CCL/HOD/Env.&amp;Forest/GA/W.O./2020-Plantation/Chatra-South/2020/1282-1302 dated: 11.05.2020 in 0.8 Ha area (for planting of 2000 Native species) completed."</p> <p>Some plantations was showed by Project authorities near Dhudhmatia nala and also adjacent to it at few places (see photos 05). <b>More plantations needs to be done along the villages and transportation route for compliance of this EC condition.</b></p>
xvi i	The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1 <sup>st</sup> May, 2018.	<b>Partially complied.</b> Project authorities have mentioned in their Six monthly compliance report that "A fund provision of Rs. 4.29 Crore has been allocated for Corporate Environment Responsibility". <b>However activity wise expenditure(on items related to CER) i.e. details of actual expenditure incurred on CER has not been submitted to this office.</b>
xvi ii	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/	<b>Being complied but further action needed.</b> Project authorities have mentioned in their six monthly compliance report that "All the statutory provisions laid down in The Mines Act 1952, Coal Mine Regulation 2017 and specific permission from DGMS relating to mining in general and opencast mining in particular have to be adhered to and implemented in



	structures due to blasting activity.	order to maintain day to day safety". Project authorities have submitted copies of ground vibration PPV, frequency, etc. study. <b>Project Proponent (PP) has submitted a copy of blasting permission obtained from DGMS( no.Ranchi area/825-27). Permission obtained was valid upto three years from the date of issue of letter but in the submitted copy date of issue of letter is not legible.</b>
xix	The Project Proponent shall comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	<b>Assured to comply.</b> Project authorities have mentioned in their six monthly compliance report that "Project proponent assures to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014, if any, issued to Amrapali Project. No such direction has been issued to Amrapali OCP till date".
xx	Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydro geological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.	<b>Project Proponent should submit a copy of Ground water level and quality report to the CGWA and State Pollution Control Board. Remaining compliance same as Compliance same as in condition xi.</b>



xxi	<p>Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial /preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of anti snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.</p>	<p><b>Being complied but further action needed.</b> Compliance of some points same as condition vii. Project authorities have mentioned in their six monthly compliance report that "It is also proposed to open a Hospital dedicated to Amrapali OCP. The tender has been floated for award of work at an estimated cost of Rs. 8.13 Crores. The work is expected to be completed by April-2022". <b>PME of contractual workers should also be submitted.</b> One First Aid station was observed in the Amrapali project (see photo 03). Project authorities informed that for IME, PME the workers/officials are sent to Dakra which is approx 35 Km far from there.</p>
xxi i	<p>Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".</p>	<p><b>Being complied but further action needed.</b> Project Proponent has submitted compliance status of the Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014. <b>Some of the stipulations of the OM that are relevant to the project are yet to be complied completely: Prevention of coal dust and OB silt material flow into Dhudmatia nala, Absence of permanent water sprinklers in main haulage road in mine, etc.</b></p>
xxi ii	<p>The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.</p>	<p><b>Being complied but further action needed.</b> Project authorities have mentioned in their six monthly compliance report that "It is ensured that noise levels are being maintained within the prescribed standards. Floodlights are oriented along the mining areas &amp; transportation routes and it is ensured that habitations are not disturbed due to lights or noise". Noise level monitoring data of two quarter June 2020 and September 2020 has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. Noise level data ranges from 40.7 dB(A) to 62.4 dB(A). <b>From the submitted data it is not clear whether the noise monitoring has been done at night or not.</b></p>
xxi v	<p>The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to</p>	<p><b>Being complied but further action needed.</b> Project authorities have mentioned in their six monthly compliance report that "An action plan for conservation of endangered flora and fauna has been prepared and submitted to State Forest Department (DFO (Chatra)) &amp; PCCF (WL) for approval. This action plan shall be implemented as per the recommendation and consultation of State Forest and Wildlife Department".</p>



800

	the Ministry of Environment, Forest and Climate Change and its Regional Office.	Project Proponent has submitted a copy of letter no. HOD(E&F)/20/1130 dated 18/02/2020 submitted to DFO, Chatra (South). In the submitted letter it was mentioned that application for EC has been made for 16.8 MTPA. However, in the preliminary conservation plan prepared by Institute of Forest Productivity, Ranchi targeted production of Amrapali OCP has been mentioned as 12.0 MTY. Project Proponent should clarify the above anomaly.
XX V	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing of the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit-for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent. The implementation report of the above said condition shall be sent to the Regional Office of the MoEF&CC.	Assured to comply. Project authorities have mentioned in their six monthly compliance report that "Project proponent assure to comply with the condition and assure that after ceasing mining operations, undertake re-grassing of the mining area and any other area which may have been disturbed due to mining activities and restore the land to a condition which is fit-for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the CCL. Progress report shall also be submitted to the Regional Office of MoEF&CC periodically".
XX vi	Amrapali Railway siding shall be completed in 3 years and road transportation to Balumath railway siding will be stopped accordingly.	Assured to comply. Project authorities have mentioned in their six monthly compliance report that "the tender for Amrapali CHP (12 MTY) has been floated on 09.05.2020. The project is under construction phase and shall be completed in the stipulated timeline".
XX vii	The distance of at least 100 m shall be kept from Barki River and Bahut Chuha nala with no mine water discharge.	Partially complied. Project authorities have mentioned in their six monthly compliance report that "Distance of more than 100 meter is being maintained from Barki River & nallah. No mining discharge is being made in the nallah & river". As per the plan submitted Honhe External OB dump is within 100m distance from Bahut Chuha nala. Catch drains and siltation ponds have been made around Honhe OB dump to prevent any silt flowing in Bahut Chuha nala.
XX viii	Project Proponent shall comply to the observation in show cause notice dated 12 <sup>th</sup> December, 2018 regarding non-compliance of earlier EC and necessary report should be submitted to the Regional	Partially complied. Project Proponent has submitted compliance status of observations made in show cause notice dated 12th December, 2018 and updated observations and remarks of this office was communicated to Ministry vide letter no. 103-



801

Office, Ranchi within stipulated time.	80/05/EPE/3638 dated 04.12.2019. Project authorities have also submitted an action taken report letter no. PO/Amrapali/MoEF&CC Compliance/ 2020-21/2378A dated 16.12.2020. <b>Though efforts have been made for compliance of old EC conditions still there remains some conditions that are still partially complied. See specific condition xv for descriptive compliance status.</b>
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Standard EC Conditions		
SN	Specific Condition	Compliance
<b>(a) Statutory Compliance</b>		
i	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project	<b>Complied.</b> Project authorities have mentioned in their six monthly compliance report that "The total project area of Amrapali OCP is 619.87 Ha out of which the total Forest land is 531.64 Ha that has been granted stage-II vide no F. No. 8-48/2008-FC Dated 12.10.2010". A copy of letter no. 8-48/2008-FC dated 12.10.2010 has been submitted to this office.
ii	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable	Project authorities have mentioned in their six monthly compliance report that "This condition is not applicable for Amrapali OCP".
iii	The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).	<b>Being complied but further action needed.</b> Project authorities have mentioned in their six monthly compliance report that "An action plan for conservation of endangered flora and fauna has been prepared and submitted to State Forest Department (DFO- Chatra) & PCCF (WL) for approval. This action plan shall be implemented as per the recommendation and consultation of State Forest and Wildlife Department." <b>Project proponent should follow up and make efforts to get the site conservation plan approved by competent authority.</b> Project Proponent has submitted a copy of letter no. HOD(E&F)/20/1130 dated 18/02/2020 submitted to DFO, Chatra (South). In the submitted letter it was mentioned that application for EC has been made for 16.8 MTPA. However, in the preliminary conservation plan prepared by Institute of Forest Productivity, Ranchi targeted production of Amrapali OCP has been mentioned as 12.0 MTY. Project Proponent should clarify the anomaly observed.
iv	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the	Compliance same as specific condition ii.



	concerned State pollution Control Board/ Committee.	
v	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	<p><b>Partially complied.</b> Amrapali OCP falls in Chatra District, which falls in "Safe" category as per CGWA categorization.</p> <p>Application for obtaining NoC was made earlier to Central Ground Water Authority for taking NOC vide ref no:-21- 4/328/JH/MIN/2018 dated 29.12.2018. The application was approved by the Regional Office of Central Ground Water Board Mid Eastern Region and was under processing of issuance of final issuance of NoC. A fresh application was submitted as per the Ministry of Jal Shakti Notification S.O. No: 3289(E) Dated: 24.09.2020 vide application No: 21-4/699/JH/MIN/2020 Dated: 29.11.2020 for Amrapali Expansion OCP. The application is under consideration at CGWA office.</p> <p><b>Groundwater was withdrawn for water utilization for water sprinkling, green belt development, etc at the Shivpur railway siding area. However project authorities did not submit any permission/approvals from competent authority (CGWA, etc.) for such Groundwater withdrawal.</b></p>
vi	Solid/hazardous waste generated in the mines need to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.	<p><b>Partially complied.</b> Project authorities have mentioned in their six monthly compliance report that "Solid &amp; hazardous waste generated in the mines are addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous &amp; Other Waste Management Rules, 2016". <b>Used oil drums were kept haphazardly without any cover/shade i.e in open space with some oil spilled on ground (see photo 60).</b> Project Proponent has submitted a copy of application submitted to Jharkhand State Pollution Control Board to obtain Hazardous waste authorization.</p>
<b>(b) Air quality monitoring and preservation</b>		



<p>i</p>	<p>Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.</p>	<p><b>Being complied but further action needed.</b> Project proponent has submitted Ambient Air quality monitoring data of quarter ending June and September 2020. Monitoring has been done by M/s CMPDIL at 4 locations. Monitoring has been done at Site office, Weight bridge, Binglath check post, Weight bridge near Hone nala. The level of total particulate matter (PM<sub>10</sub>+PM<sub>10</sub>) ranges from 118 to 336 µg/m<sup>3</sup>, PM<sub>10</sub> ranges from 55 to 187 µg/m<sup>3</sup>, PM<sub>2.5</sub> ranges from 21 to 87 µg/m<sup>3</sup> SOx and NOx were found within the stipulated limit. Heavy metals monitoring data of Pb, As, Ni has been submitted by project proponent. Monitoring has been done by M/s Central Mine Planning &amp; Design Institute Limited (CMPDI) and the parameters were found within limit. <b>However, heavy metals monitoring data of Hg, Cd, Cr has not been submitted.</b> Project authorities have mentioned in their six monthly compliance report that "The supply order of the installation of continuous PM10 analyzer has been issued to M/s Environment SA Pvt. Ltd. for installation of the same at 25 numbers of railway siding including Balumath Railway Siding. The procurement of CAAQMS system at Project Office of Amrapali OCP (Core Zone of Amrapali OCP) &amp; Project Office of Magadh OCP(Buffer zone of Amrapali OCP) is also under progress from GeM portal of Govt. of India". <b>Spontaneous combustion was observed at one place in O/B dump (see photo 36). It was instructed to eliminate spontaneous combustion in the mine project area.</b></p>
<p>ii</p>	<p>The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.</p>	<p>Compliance same as in condition no. b (i).</p>
<p>iii</p>	<p>Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air</p>	<p><b>Partially complied.</b> Project authorities have mentioned in their six monthly compliance report that "Transportation of coal, to the extent permitted by road, is being carried out by covered trucks". Tarpaulene covering was done on the coal transportation trucks (see photo 18).</p>



804

<p>pollution (with higher values of PM10/PM25) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.</p>	<p>However there was coal spillage on coal transportation routes. It may be due to improper covering, loading of coal till the top of truck, etc. It was instructed that a free board of minimum 5 cm in all loaded vehicles/trucks along with proper covering with impervious material to prevent escape of times should be followed for all coal transportation trucks.</p> <p>Few fixed water sprinklers were operational for some part in the one of weighbridge/coal stock area (see photo 22). However, some of fixed water sprinklers in line were not operational (see photo 22). Project authorities informed that due to pipe breakage some sprinklers were non operational. It was instructed to make arrangements so that water sprinklers remain operational regularly and it should be rectified as soon as some problems are encountered there.</p> <p>Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks more frequently.</p> <p>Grader/scraper was used for leveling, cleaning of road between Amrapali Mine project and Shivpur Railway siding (see photo 43). But coal dust/debris has been pushed on both sides of roads (see photos 42, 45, 54 &amp; 55). Water tankers was observed sprinkling water on the coal transportation road to Amrapali siding but it did not seem sufficient. More water tankers should be deployed on the route for water sprinkling. Road sweeping machines can also be deployed. Steps should be taken to ensure that there is no coal spillage on the road because there were village dwellings/habitations adjacent to that road who would be adversely affected by the coal dust emissions there. Surface miner was observed in the mine that was utilised for coal breakage/excavation (see photo 35). However coal dust emissions was observed during the operation of surface miner. Also during loading of coal by loaders into trucks there was a lot of coal dust emissions (see photos 39 &amp; 40). Even though water tankers were utilized for wetting of coal there (see photos 38) there was coal dust emissions during coal loading.</p>
<p>iv The transportation of coal shall be carried</p>	<p>Being complied but further action needed.</p>



205

	out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.	Project authorities have mentioned in their six monthly compliance report that "the transportation of coal is being carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan". It is mentioned in the addendum EIA/EMP of Amrapali OCP( page no 11) that coal is being transported by trucks to Shivpur railway siding which is at a distance of 07 km from project boundary. However in the copy/pages of the mining plan submitted by PP there is no mention of coal transportation route nor any drawing/plate attached showing the route.
v	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining PUC certificate from the authorized pollution testing centres.	Being complied. Project authorities have mentioned in their six monthly compliance report that "All measures are being undertaken to keep vehicular emission under control. All the vehicles engaged in mining and allied activities are being operated only after obtaining PUC certificate from the authorized pollution testing centers". Copies of few valid PUC certificates have been submitted by project proponent.
vi	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	Partially complied. Project authorities have mentioned in their six monthly compliance report that "The condition shall be complied when construction of crusher and in-pit belt conveyors will be completed. All measures for environmental protection shall be undertaken as also listed in the tender document of Amrapali CHP". Fixed water sprinklers were installed at one of the coal stockpile/weighbridge area but few of those sprinklers were operational. Other fixed water sprinklers there were not operational (see photos 22 & 23). There were no fixed water sprinklers/rain gun, etc. at main coal dump, other weighbridges/coal stocks. Drill are wet operated (see photo 41). At the Shivpur railway siding wind screen was observed (see photos 49 & 50) although it was torn/broken at few place. Plantations along the sides of siding was also observed (see photo 50 & 52).
vii	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.	Assured to comply. Project authorities have mentioned in their six monthly compliance report that "The condition shall be complied when construction of crusher and in-pit belt conveyors will be completed. All measures for environmental protection shall be undertaken as also listed in the tender document of Amrapali CHP".
<b>(c) Water quality monitoring and preservation</b>		
(i)	The effluent discharge (mine waste water, workshop effluent) shall be monitored in	Partially complied. Effluent water monitoring data of two quarter June 2020 and September



	terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.	2020 has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. The parameters were found within limit. <b>However, Project proponent should submit the Effluent water monitoring data of workshop effluent.</b>
(ii)	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	<b>Being complied but further action needed.</b> Monitoring data has been uploaded on the company's website along with six monthly compliance reports. <b>Environmental parameters were not displayed at suitable locations locations.</b>
(iii)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.	<b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "Monitoring report of Piezometer for winter session (Jan), Pre-Monsoon & Monsoon session has been sent to the CGWB Patna vide ref no. PO/Amrapali OC/2019-20/2158 dated 16.01.2020 & vide ref no. PO/Amrapali OC/2020-21/740 Dated-29-06-2020 & vide ref no. PO/Amrapali OC/2020-21/1378 dated 10.09.2020 respectively". One Piezometer was installed in the project (see photo 02) and it was connected to Digital water level recorder (DWLR) (see photo 01). The water level was showing at 7.3 m BGL in DWLR at the time of inspection. Piezometer monitoring data of June and August has been submitted. The water level was 48.62 and 5.3 m BGL in June and August respectively. In addition to above, well inventory and water level data of Amrapali OCP has been submitted by Project Proponent. The location of the well were in Honhe, Rahem, Shivpur, Shisai, Garilong etc. Project Proponent has submitted drinking water quality data (of borewell water) of two quarter endings June and September 2020. Monitoring has been done by M/s CMPDIL. <b>The level of fluoride was found more than permissible limit on December quarter ending data.</b> PP has submitted pre and post monsoon water level data of 2016, 2017, 2018 and 2020 and pre monsoon data of 2019. Water level ranges from 1.50 m BGL to 11.50 m BGL.
(iv)	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	<b>Being Complied.</b> Water quality monitoring data upstream and downstream of Honhe Nallah of two quarter June 2020 and September 2020 has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. Upstream monitoring data of Barki river, Chundru river and monitoring data of after Chundru river & Barki river confluence point, Open Well Ursu Village,



		Hand Pump Ursu Village has been submitted by PP. Monitoring has been done by M/s CMPDIL. However, the date of monitoring is not mentioned in the submitted monitoring data.
(v)	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	<p><b>Partially complied.</b> Project authorities have mentioned in their six monthly compliance report that "No ground water is being utilized for mining operations. Several rainwater harvesting measures has been undertaken for Amrapali OCP. Work has been awarded &amp; completed for installation &amp; Construction of rainwater harvesting system at PO office and Executive Hostel of Amrapali Project &amp; LOA issued vide ref no:-GM(M-A)/SO(Civil)/Dakra/LOA /2019-20/17 dated:-05.03.2020".</p> <p><b>Groundwater was withdrawn for water utilization for water sprinkling, green belt development, etc at the Shivpur railway siding area. However project authorities did not submit any permission/approvals from competent authority (CGWA, etc.) for such Groundwater withdrawal. Roof top rainwater harvesting was observed in PO office and adjacent buildings there (see photos 63 &amp; 64).</b></p>
(vi)	Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/ habitation/water bodies.	<p><b>Partially complied, Action being taken for compliance but still partially complied.</b> Some plantations was showed by Project authorities near Dhudhmatia nala and also adjacent to it at few places (see photos 05). <b>Overburden material was observed in the slopes facing Dhudhmatia nala at many places (see photos 06 &amp; 12). It was instructed to develop grassing and vegetation urgently on the slopes facing Dhudhmatia nala. Catch drains were made adjacent to the coal dump in such a way that there was coal transportation road between coal dump and catch drains (see photo 07). Depth and width of catch drains near coal dump was not sufficient. Since there were no siltation ponds attached with those catch drains there were chances that coal dust water would flow to Dhudhmatia nala adjacent to those drains. Also there were open places between drains (see photo 08) for vehicle movement and coal dust would flow from there to Dhudhmatia nala. It was instructed to project authorities to make full proof arrangement, Catch drains of appropriate depth and width, siltation ponds etc. to ensure that no coal dust flows into the Dhudhmatia nala. Catch drain and siltation pond was being constructed on one side of one of the coal</b></p>



808

	<p>dump on east side of mine pit (see photo 14). It was instructed to increase the depth of drains there and build siltation ponds also. At least four coal dumps/coal stockpile were observed in the project (see photos 7, 14, 15, 23, 61, 62). Project authorities informed that the coal dump on the east side of mine pit would be discontinued very soon and no more coal would be stocked there. For the other coal stockpiles project authorities informed that due to weighbridge coal stocks accumulates and look like coal stockpile. It was instructed to construct catch drains and siltation ponds around these coal stocks/dumps also. Project authorities also showed catch drains around coal dumps on one of the weigh bridge (see photo 24). There was water in the sump of Amrapali mine (see photo 16). On the slopes from coal weighbridge area drains were constructed (see photo 19) and connected to a newly constructed siltation pond (see photo 20). This was being done for preventing coal dust flow to downside in river Barki. However civil work was yet to complete there. Some gabions may be required there for complete control of coal dust/silt flow. Garland drain and fencing was observed in the east side of the mine pit (see photos 4 &amp; 13). <b>Bingalat OB dump:</b> Catch drains were observed on some portions of Bingalat O/B dump (see photos 25 &amp; 26). However on some portions catch drains were not constructed (see photos 27 &amp; 28). Siltation ponds were not constructed along with catch drains in the Bingalat O/B dump facing Bingalat village and Dhudhumatia nala. There were portions between Bingalat O/B dump and Dhudhumatia nala where catch drains siltation ponds and toe wall was not constructed (see photos 26 &amp; 27). and it was instructed to construct those urgently/immediately. <b>Honhe OB dump:</b> Catch drains and siltation ponds were observed around Honhe O/B dump (see photos 66 &amp; 68). Gaps between toe walls around Honhe O/B dump has been filled (see photo 32). Retaining wall at the toe of the dump was observed on most part of the Honhe O/B dump (see photos 67 &amp; 32). Around Bingalat O/B dump, retaining wall at the toe of the dump was observed on many portions except a few portions especially along the side facing Dhudhumatia nala (see photo 26 &amp; 27). Catch drains and siltation pond adjacent to</p>
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		<p>the Shivpur railway siding had been silted/filled with coal dust (see photo 52). Also some coal dust was observed beyond the siltation pond there which means there was leakage of coal dust into the surroundings (see photo 53).</p> <p>Catch drain on the east side of the top soil dump was constructed (see photo 69). <b>Toe wall was observed between top soil dump and Honhe O/B dump. However there was no Catch drains/ toe wall between top soil dump and O/B dump in the south side (see photo 70).</b></p>
(vii)	<p>Adequate groundwater recharge measures shall be taken up for augmentation of groundwater. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).</p>	<p><b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "01 no of Pond has been constructed at Honhe, 01 no of pond has been constructed at Birhortola (Koyed). Construction of 1 No of pond at Ursu more is completed."</p> <p>There was water in the sump of Amrapali mine (see photo 16). Check dam was built on Dhudhmatia nala (see photo 18). Garland drain and fencing was observed in the east side of the mine pit (see photos 4 &amp; 13). Roof top rainwater harvesting was observed in PO office and adjacent buildings there (see photos 63 &amp; 64). Project authorities showed a pond near Honhe village (see photo 65) and informed that the pond was constructed by project for rainwater harvesting. RO water plant was observed for Amrapali project (see photo 21). Project authorities informed that local villagers were allowed to take water freely from RO water plant.</p>
(viii)	<p>Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.</p>	<p><b>Partially complied.</b> Project authorities have mentioned in their six monthly compliance report that "Provision of ETP has been made in the workshop. Work awarded to NBCC for Construction of Workshop along with ETP for the expansion project vide No. NBCC/ED/CPGY/2020/500 Dated:13.11.2020". <b>Oil and grease trap was observed in the project. However, it appeared that it was not utilised for washing of HEMM/trucks there. The oil and grease trap was too small for such a large project where many HEMM and trucks were operational (see photos 58). Also discharge from oil and grease trap was released from two sides into a pit that was very close to Dhudhmatia nala (see photos 57&amp; 59). There was no mechanism for water recirculation after cleaning (after elimination of oil &amp; grease). Project authorities did not explain satisfactorily where they store the oil &amp; grease taken out of the trap and how</b></p>



		<p><b>much quantity of oil and grease was collected for last couple of months.</b></p> <p>Effluent water monitoring data of Mine water of two quarter June 2020 and September 2020 has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. The parameters were found within limit. <b>However, Project proponent should submit the Effluent water monitoring data of workshop.</b></p>
(ix)	<p>The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.</p>	<p><b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "The water pumped out from mine is being utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains are being silted once in a year Pre-monsoon for proper channeling of water into sedimentation ponds".</p>
(x)	<p>The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/ pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural watercourses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority.</p> <p>The construction of embankment to prevent any danger against intrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.</p>	<p><b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "The surface drainage map, water table contour map &amp; watershed map of Amrpali OCP is enclosed".</p> <p>The diversion of nallah is proposed as per the approved Mining Plan &amp;EIA/EMP report. Due approval before diversion of nallah shall be taken and it will be submitted to MoEF&amp;CC.</p> <p>Barki River marks the eastern boundary of the property with a safe distance of about 100 mtrs".</p> <p>No embankment was observed in the Mine project. Project authorities informed that whenever need arises embankment shall be made to prevent any danger against surface water into mine.</p>
(xi)	<p>The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coalmine up to a distance of 5 km. A riverine /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.</p>	<p><b>Partially complied.</b> Project authorities have mentioned in their six monthly compliance report that "The surface drainage map, water table contour map &amp; watershed map of Amrapali OCP is enclosed".Surface drainage map, water table contour map &amp; watershed map has been submitted by Project Proponent(PP).A <b>riverine/riparian ecosystem conservation and management plan has not been submitted by PP.</b></p> <p>Overburden material was observed in the slopes facing Dhudhmatia nala at many places (see photos 06 &amp; 12). It was instructed to develop grassing and vegetation urgently on the slopes facing Dhudhmatia nala. Grassing and vegetation have been developed at many places on Bingalat O/B dump (see photos 06 &amp;</p>



		<p>30). However there are still many places on the Bingalat O/B dump where grassing and vegetation has not been developed (see photos 26, 27, 28 &amp; 30). Grassing and vegetation should be developed urgently on the sides/slopes of O/B dump facing Dhudmatia nala (see photos 26 &amp; 27) and also on the remaining. Catch drains were made adjacent to the coal dump in such a way that there was coal transportation road between coal dump and catch drains (see photo 07). Depth and width of catch drains near coal dump was not sufficient. Since there were no siltation ponds attached with those catch drains there were chances that coal dust water would flow to Dhudmatia nala adjacent to those drains. Also there were open places between drains (see photo 08) for vehicle movement and coal dust would flow from there to Dhudmatia nala. It was instructed to project authorities to make full proof arrangement, Catch drains of appropriate depth and width, siltation ponds etc. to ensure that no coal dust flows into the Dhudmatia nala. On the slopes from coal weighbridge area drains were constructed (see photo 19) and connected to a newly constructed siltation pond (see photo 20). This was being done for preventing coal dust flow to downside in river Barki. However civil work has not been completed yet. Some gabions may be required there for complete control of coal dust/silt flow.</p>						
<p><b>(d) Noise and Vibration monitoring and prevention</b></p>								
<p>(i)</p>	<p>Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipment (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.</p>	<p><b>Being complied but further action needed.</b> Noise level monitoring data of two quarter June 2020 and September 2020 has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. Noise level data ranges from 40.7 dB(A) to 62.4 dB(A). <b>From the submitted data it is not clear whether the monitoring has been done at night or not.</b> PP has submitted total number of ear muffs/plugs provided to workers for the year 2016 &amp; 2020:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2016</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Ear Muffs/Plugs</td> <td>02</td> <td>87</td> </tr> </tbody> </table> <p>Total number of Ear plugs/Muffs provided in the year 2017, 2018, 2019 was not provided by PP.</p>	Year	2016	2020	Ear Muffs/Plugs	02	87
Year	2016	2020						
Ear Muffs/Plugs	02	87						
<p>(ii)</p>	<p>Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, Fly rocks, noise and air blast</p>	<p><b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "Controlled blasting techniques are adopted.</p>						



	etc., as per the guidelines prescribed by the DGMS.	Blasting is done only in daylight hours. Proper blast design is prepared to control ground vibrations and arrest flyrocks and boulders; Blasting is done by use of NONEL Technology & Electronic detonator for reducing Noise Pollution and Vibration".
(iii)	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.	<b>Being complied but further action needed.</b> Noise level monitoring data of two quarter June 2020 and September 2020 has been submitted by Project Proponent. Monitoring has been done by M/s CMPDIL. Noise level data ranges from 40.7 dB(A) to 62.4 dB(A). <b>From the submitted data it is not clear whether the noise monitoring has been done at night or not.</b>
<b>(e) Mining Plan</b>		
(i)	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made thereunder as applicable.	<b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "Mining is being carried out as per the provisions of Mines Act 1952 and subordinate legislations there under".
(ii)	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS)	<b>Being complied but further action needed.</b> Project authorities have mentioned in their six monthly compliance report that "Mining is being done in abidance to the approved mining plan and under permission of Directorate General Mines Safety (DGMS)". <b>In the backfilled area in the lower portion vehicles plied for various activities (see photo 17). However it was suggested that proper slope stability studies may be done so that there is no danger from dump failures/slope failures which may lead to risk to men and machinery (see photo 17).</b> Project proponent has submitted a copy of mining plan & mine closure plan ( without plates and drawings) and assured to comply with the provisions of the approved mining plan & Mine Closure Planned the relevant circulars issued by Directorate General Mines Safety (DGMS).
(iii)	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	<b>Partially complied. Project proponent did not show any effects/process in the project done for reducing energy and fuel consumption &amp; use of renewable energy.</b>
<b>(f) Land Reclamation</b>		
(i)	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFC) from time to time shall be submitted to MOEFCC/Regional Office (RO).	<b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "Digital Survey of entire core zone using Satellite Remote Sensing survey is being carried out once in three years. The last two survey carried out in Year 2015 & Year 2018 is enclosed". Project Proponent has submitted Land Restoration / Reclamation Monitoring satellite



		data of the year 2015 and 2018, prepared by M/s CMPDIL.
(ii)	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive topsoil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.	<b>Assured to comply.</b> Project authorities have mentioned in their six monthly compliance report that "The final mine void depth shall be as per the approved mining plan. The remaining area shall be backfilled and bio-reclaimed as per the approved mine closure plan. A total amount of Rs. 2744.08 Lakhs has been deposited till 01.04.2020 out of the total mine closure corpus of Rs. 5578.83 Lakhs. A separate account has been opened in Bank of Baroda Vide account no: 00170100019666. The proposed post mining land use & breakup of activity-wise mine closure cost is enclosed". Backfilling in the mine in already coal exhausted areas was being done (see photos 17 & 37).
(iii)	The entire excavated area, backfilling, external OS dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-à-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.	<b>Assured to comply but further action needed.</b> Project proponent assured "that the land use of the project shall be in conformity with land use pattern as submitted in the approved mining plan & EIA/EMP report. The progressive compliance status vis-a-vis the post mining land use shall be submitted". <b>PP should submit progressive compliance status vis-à-vis the post mining land use pattern as per this EC condition.</b>
(iv)	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines.	<b>Assured to comply.</b> Project authorities have mentioned in their six monthly compliance report that "At present there is no fly ash dumping in the project. However if the fly ash shall be used for dumping the provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time shall be followed". Backfilling was being done in mine but no use of fly ash was observed.
(v)	Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The topsoil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan.	<b>Partially complied.</b> Project authorities have mentioned in their six monthly compliance report that "The time schedule specified in the mine closure plan shall be adhered to. The remaining area shall be backfilled and bio-reclaimed as per the approved mine closure plan. A total amount of Rs. 2,744.08 Lakhs has been deposited till 01.04.2020 out of the total mine closure corpus of Rs. 5578.83 Lakhs. A separate account has been opened in Bank of Baroda Vide account no: 00170100019666. The proposed post mining land use & breakup of activity-wise mine closure cost is enclosed". Top soil dump was observed in the project. <b>Grassing and vegetation have been</b>



	Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.	developed at many places on Bingalat O/B dump (see photos 06 & 30). However there are still many places on the Bingalat O/B dump where grassing and vegetation has not been developed (see photos 26, 27, 28 & 30). Grassing and vegetation should be developed urgently on the sides/slopes of O/B dump facing Dhudhmata nala (see photos 26 & 27) and also on those portions which is not under active O/B dumping. Plantations were observed on Bingalat O/B dump (see photos 31 & 33). Some manpower /agency were involved/observed watering the plants over Bingalat O/B dump (see photo 29). Project authorities showed plantations on slope of Bingalat O/B dump that was done by state forest department (see photo 34).
(vi)	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	<b>Being complied. Reportedly complied as per PP.</b> Project Proponent reported in their Six monthly compliance report that "At present, there is no grazing land is involved in the project area of 619.87 Ha".
<b>(g) Green Belt</b>		
(i)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/ endemic flora/fauna, if any, spotted/ reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	Compliance status same as in specific condition xxiv.
(ii)	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. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.	<b>Partially complied.</b> Greenbelt consisting of 3-tier plantation of width not less than 7.5 m has not been developed. Some Green belt has been developed along the major approach/coal transport roads. However, there remains many areas along the above mentioned roads where green belt has yet to be developed.
<b>(b) Public hearing and Human health issues</b>		
(i)	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.	<b>Partially complied.</b> Project Proponent reported in their Six monthly compliance report that "Adequate illumination is being ensured at all mine locations (as per DGMS standards) and monitored weekly. The copy of the NIT floated for providing Lighting arrangement at Transport road and along outside periphery of substation at



		Amrapali OCP is enclosed". Project proponent has not submitted weekly illumination monitoring data.												
(ii)	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.	Compliance same as specific condition vii.												
(iii)	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	<p><b>Being complied but further action needed.</b> Project Proponent has submitted total number of PPEs provided to workers. Year wise details of protective respiratory devices provided to workers given below</p> <table border="1"> <thead> <tr> <th></th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Dust Mask</td> <td>Nil</td> <td>Nil</td> <td>254</td> <td>41</td> <td>1252</td> </tr> </tbody> </table> <p><b>Project proponent should explain why only 41 dust masks were issued in the year 2019 and Nil dust masks were issued in the year 2016 and 2017.</b></p> <p>Project proponent has also submit that VTC has been provided to 245 contractual workers in the year 2020. No details have been provided regarding training provided in the year 2018 and 2019.</p>		2016	2017	2018	2019	2020	Dust Mask	Nil	Nil	254	41	1252
	2016	2017	2018	2019	2020									
Dust Mask	Nil	Nil	254	41	1252									
(iv)	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.	<p><b>Being complied but further action needed.</b> Project Proponent reported in their Six monthly compliance report that "All issues raised during Public Hearing have been complied. The public hearing proceedings &amp; action taken report is enclosed. R &amp; R plan has been prepared as per the details submitted in EIA/EMP report and is being followed to provide all benefits as per the CIL approved R &amp; R Policy. Land compensation for 38 acres has been paid till date". In the R&amp;R proforma project proponent submitted that total families affected is 452 and families yet to be rehabilitated is 452; total employment to be provided is 297 and employment given so far is 85. Project proponent has submitted a copy of Public hearing proceedings and action taken report. <b>Project authorities should take concrete steps for controlling air and water pollution as committed in Public hearing.</b></p>												



(v)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Compliance status same as specific condition xxii
<b>(i) Corporate Environment Responsibility</b>		
(i)	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-1A.III dated 1 <sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.	<b>Partially complied.</b> Project authorities have mentioned in their Six monthly compliance report that "A fund provision of Rs. 4.29 Crore has been allocated for Corporate Environment Responsibility." However activity wise expenditure (on items related to CER) has not been submitted to this office.
(ii)	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/ conditions and/or shareholders/stake holders.	<b>Partially complied.</b> Project proponent has submitted a copy of environmental policy approved by the Board of Directors. However, in the environmental policy no details have been provided on standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/ conditions. Project authorities should also submit documents to prove that there exists system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/conditions and/or shareholders /stake holders.
(iii)	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	<b>Being complied.</b> Project Proponent reported in their Six monthly compliance report that "Separate Environmental cell both, at project & company head quarter level has been setup". Project proponent has submitted a copy of letter no. CCL/HOD(E&F)/2019/348 dated 26.07.2019, in which committee has been constituted at area level.
(iv)	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional	<b>Partially complied.</b> Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company (duly approved by competent authority) has not been submitted by project proponent. Expenditure data on environmental protection measures and year wise progress of implementation of action plan should be submitted to IRO, Ranchi.



	Office along with the Six Monthly Compliance Report.	
(v)	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	<b>Assured to comply.</b> Project Proponent reported in their Six monthly compliance report that "As directed, a third party assessment shall be carried out for Amrapali OCP undertaken once in three years through experts agency recognized by MoEF&CC. Self environmental audit shall also be conducted annually and report will be submitted to MoEF&CC".
<b>(j) Miscellaneous</b>		
(i)	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	<b>Complied but timeline not followed.</b> Project Proponent has submitted copies of newspaper cutting. <b>The advertisement has been made in "Prabhat Khabar" and in "the pioneer" on 25.07.2020.</b> The EC letter has been uploaded on the website of Project proponent.
(ii)	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	<b>Being complied but further action needed.</b> Project Proponent has submitted a copy of letter no. PO/Amrapali/Env/2019-20/2735A dated 25/03/2020 addressed to Mukhiya of Koed, Raham, Tandwa, Kasiadih & Gardlong regarding submission of EC letter. Project Proponent vide their email dated 07/01/2021 submitted a copy of receipt of EC marked to Mukhiya, Gram Panchayat Koyed. <b>Date of receipt of the EC letter by Mukhiya is not mentioned.</b>
(iii)	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half yearly basis.	<b>Being complied.</b> Six monthly compliance reports have been submitted to this office and it is uploaded on website of the project proponent.
(iv)	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	<b>Being complied but further action needed.</b> Project authorities have mentioned in their six monthly compliance report that "CCL is monitoring the criteria pollutants level namely; PM10, PM2.5, SO2, NOx every fortnight. The monitoring data is being displayed at CCL website with six monthly compliance reports & Environment Statement in Form-V". Project Proponent has submitted monitoring data of Ambient air, Noise, Surface water, Drinking water of two quarters June and September 2020 and the same has been uploaded on website. <b>Display of criteria pollutants or critical sectoral parameters not displayed at a convenient location for disclosure to public.</b>



(v)	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.	<b>Being complied.</b> Six monthly compliance reports have been submitted to this office and it is uploaded on website of the project proponent.
(vi)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	<b>Compliance same as condition (h) (v).</b>
(vii)	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	<b>Being complied.</b> Environmental statement has been submitted to this office and it is uploaded on website of the project proponent.
(viii)	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.	<b>Complied.</b> Project authorities have mentioned in their six monthly compliance report that "Amrspali OCP is operational from 07.02.2014. The progressive reports are being submitted to MoEF&CC with six monthly compliance periodically".
(ix)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	<b>Being complied.</b> Project authorities have mentioned in their six monthly compliance report that "Project proponent is strictly adhering to the stipulations made by the Jharkhand State Pollution Control Board."
(x)	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	<b>Agreed to comply.</b> Project authorities have mentioned in their six monthly compliance report that "Project proponent is taking action as per the commitments and recommendations made in the EIA/EMP report/public hearing and submission made to MoEF&CC. The updated status shall be submitted to MoEF&CC every six month with compliance report".
(xi)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.	Project authorities have mentioned in their six monthly compliance report that they " <b>Agreed to comply</b> ".
(xii)	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Project authorities have mentioned in their six monthly compliance report that they " <b>Agreed to comply</b> ".
(xiii)	The Ministry may revoke or suspend the	Project authorities have mentioned in their six



	clearance, if implementation of any of the above conditions is not satisfactory.	monthly compliance report that they "Agreed to comply".
(xiv)	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Project authorities have mentioned in their six monthly compliance report that they "Agreed to comply".
(xv)	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information / monitoring reports.	<b>Being complied.</b>
(xvi)	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Honble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Project authorities have mentioned in their six monthly compliance report that they "Agreed to comply".

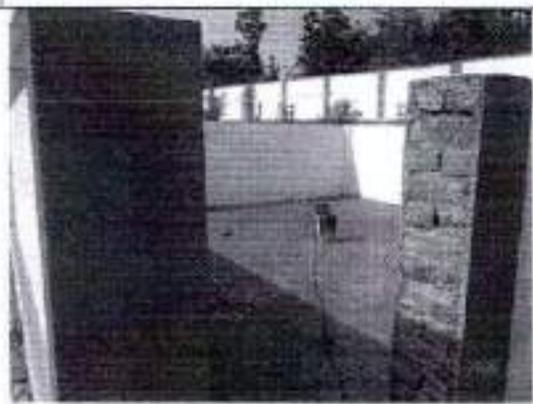


Photo01:Photo of Digital water level recorder(DWLR) Photo02:Photo of borehole for Piezometer . connected with Piezometer in Amrapali project.





Photo03:Photo of a first aid station in the project



Photo 04: Photo of garland drain and fencing in the east side of the mine pit



Photo 05: Photo of some green belt developed in the project.



Photo06:Photo of Dhudhmatia nala and slope made of OB material.Coal dump can be seen in right side



Photo 07: Photo of coal dump and catch drain with a transportation road between them



Photo08:Photo of catch drain without any siltation pond and no other provisions for preventing coal dump water to flow into Dhudhmatia nala.





Photo 09: Photo of water being withdrawn from Dhudhmatia nala into water tanker.



Photo 10: Photo of checkdam at Dhudhmatia nala. Adjacent to it is Bingalat OB dump.



Photo 11: Photo of some plantations on the sides haul roads in project.



Photo 12: Photo of exposed OB material on the of slopes of haul road adjacent to Dhudhmatia nala.



Photo 13: Photo of pucca wall and drain on the east side of mine pit



Photo 14: Photo of catch drain and siltation pond on one side of one of the coal dumps





Photo 15: Photo of the coal dump in the east side of mine pit



Photo 16: Photo of water in the sump of Amrapali mine project.



Photo 17: Photo of internal dump. Some machines were observed plying in lower portions



Photo 18: Photo of tarpauline covering on coal transportation trucks.



Photo 19: Photo of drains connected from coal weighbridge area to siltation pond



Photo 20: Photo of siltation pond to prevent coal dust flowing towards low lying areas and towards Barki river





Photo 21: Photo of RO water plant in the project



Photo 22: Photo of operational fixed water sprinklers near one of the coal weighbridge area.



Photo 23: Photo of non operational fixed water sprinklers near the coal weighbridge area.



Photo 24: Photo of small catch drain around the coal weighbridge area.



Photo 25: Photo of catch drain in one side ( east) of Bingalat OB dump



Photo 26: Photo of Dhudhmatia nala adjacent to OB material of Bingalat OB dump.





Photo 27: Photo of Dhudmatia rala adjacent to Bingalat OB dump without catch drain, retaining wall.



Photo 28: Photo of Bingalat OB dump with no catch drain, retaining wall ( east side).



Photo 29: Photo of watering in new plants on Bingalat OB dump



Photo 30: Photo of retaining wall and grassing and vegetation on Bingalat OB dump ( west side)



Photo 31: Photo of new plantations on Bingalat OB dump



Photo 32: Photo of filled gaps in retaining wall around Honhe OB dump





Photo33:Photo of plantations on Bingalat OB dump



Photo 34: Photo of plantation of almost same species on the slopes on Bingalat OB dump



Photo 35: Photo of surface miner operational on coal benches in mine

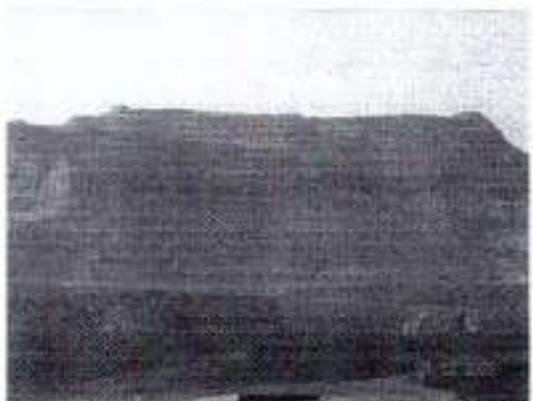


Photo 36: Photo of spontaneous heating in OB dump of project.



Photo 37: Photo of internal dumping being carried out in the Amrapali project



Photo 38: Photo of water tanker used for water sprinkling on coal benches.



Photo 39& 40: Photo of coal dust emissions during loading on coal benches of mine.



Photo 41: Photo of wet drilling arrangements in one of the drill machines operational in mine.



Photo 42: Photo of road between project and Shivpur railway siding with coal debris pushed on both sides.



Photo 43: Photo of grader/scrapper used for leveling and cleaning of road between project and railway siding



Photo 44: Photo of pond adjacent to coal transportation road with no safeguards/drains in between





Photo45:Photo of road between project and Shivpur railway siding with coal debris pushed on both sides.



Photo 46: Photo of nala in between project and Shivpur siding with coal dust on the bridge slopes

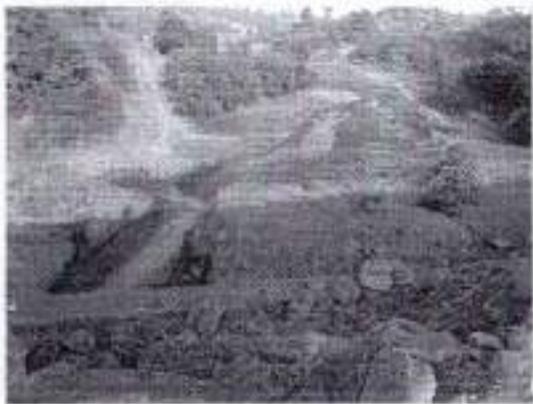


Photo 47& 48: Photo of nala in between project and Shivpur siding with coal dust/debris on its bridge slopes



Photo49:Photo of platform of Shivpur railway siding. Wind screen can also be seen there.



Photo 50: Photo of wind screen and plantations on one side at the Shivpur railway siding.





Photo 51: Photo of railway siding area



Photo 52: Photo of silted drains and siltation pond in one side of the Shivpur siding.



Photo 53: Photo of coal dust flowing beyond the siltation pond at Shivpur siding



Photo 54: Photo of road between project and Shivpur railway siding with coal debris pushed on both sides.



Photo 55: Photo of road between project and Shivpur railway siding with coal debris pushed on both sides.



Photo 56: Photo of water tanker sprinkling water on the coal transportation road





Photo 57: Photo of water discharge towards nala from washing platform in workshop area



Photo 58: Photo of oil and grease trap in Amrapali project



Photo 59: Photo of water storage adjacent to Dhudhmatia nala connected to oil & grease trap.



Photo 60: Photo of used oil drum kept without shed. Some oil can be seen spilled on ground



Photo 61 & 62: Photo of one of the coal dumps/weighbridges area without any catch drain/siltation pond around it.





Photo 63: Photo of PO office of Amrapali project.



Photo 64: Photo of rooftop rainwater harvesting in PO office and adjacent building.



Photo 65: Photo of a pond near Honhe village



Photo 66: Photo of siltation pond connected to catch drain around Honhe OB dump



Photo 67: Photo of retaining wall around Honhe OB dump. Grassing on OB dump can also be seen



Photo 68: Photo of catch drain around Honhe OB dump





Photo 69: Photo of catch drain in east side of the top soil dump



Photo 70: Photo of retaining wall between Honhe OB dump and top soil dump.

**Summary of the report**

Project was monitored by Integrated Regional Office, Ranchi on 21.12.2020. Project proponent has informed that a proposal for expansion of the project is under consideration at MOEF&CC and requested for a certified compliance report from IRO Ranchi. The salient observations of the monitoring report are as follows:

**Specific Conditions:**

**Following conditions are partially complied:**

**Condition vi:** Some of fixed water sprinklers in line ( at the weighbridge area) were not operational. Project authorities informed that due to pipe breakage some sprinklers were non operational. It was instructed to make arrangements so that water sprinklers remain operational regularly and it should be rectified as soon as some problems are encountered there. Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks move frequently.

Grader/scrapper was used for levelling, cleaning of road between Amrapali Mine project and Shivpur Railway siding. But coal dust/debris has been pushed on both sides of roads. Water tanker was observed sprinkling water on the coal transportation road to Amrapali siding but it did not seem sufficient. More water tankers should be deployed on the route for water sprinkling. Road sweeping machines can also be deployed. Steps should be taken to ensure that there is no coal spillage on the road because there were village dwellings/habitations adjacent to that road who would be adversely affected by the coal dust emissions there. Project Proponent has submitted running hours of 3 departmental (3<sup>rd</sup> tanker operational since 11.08.2020) and 13 contractual water tankers. Average running hours of departmental water tankers were approximately 4-5 hr/day which is less than satisfactory. The running hours of contractual water tankers were approximately 4 hr/day, which is less than satisfactory. Project Proponent should ensure 3-4hr/ shift of water sprinkling per tanker especially in dry seasons.

**Condition ix:** Some green belt development could be seen in the project. However thick green belt of adequate width at the final boundary in the downward direction has not been developed yet by project authorities to mitigate/check the dust pollution.



**Condition x:** Water was withdrawn from Dhudhmata nala for water sprinkling in the project by water tankers. However, project authorities did not submit surface water / river water withdrawal permission from concerned department.

**Condition xi:** Groundwater was withdrawn for water utilization for water sprinkling, green belt development, etc. at the Shivpur railway siding area. However, project authorities did not submit any permission/approvals from competent authority (CGWA, etc.) for such Groundwater withdrawal there.

**Condition xiv:** Grassing and vegetation have been developed at many places on Bingalat O/B dump. However there are still many places on the Bingalat O/B dump where grassing and vegetation has not been developed. Grassing and vegetation should be developed urgently on the sides/slopes of O/B dump facing Dhudhmata nala and on remaining portions also.

**Condition xv:** Efforts made for compliance, Work in progress. Project proponent has submitted Action taken report dated 16.12.20. Efforts have been made for compliance of many EC (old) conditions. However, there still remains some partially complied conditions as given below:

- There has been some improvement in grassing and vegetation on O/B dumps but still there remains portion where grassing and vegetation have not been developed. There are two external dump in the project, Honhe O/B dump and Binglat O/B dump. Partially complied, work in progress (Specific condition iii of earlier EC).
- Catch drain and siltation ponds around Honhe dump has been made. However, catch drains and siltation pond (in the remaining portions) around Binglat O/B dump (especially adjacent to Dhudhmata nala) has to be made. Similarly Catch drains & siltation ponds around all coal dumps/heaps/stocks needs to be constructed-Partially complied. (Specific condition iv of earlier EC).
- Retaining wall made around Honhe O/B dump. Retaining wall around Binglat O/B dump especially facing Dhudhmata nala needs to be constructed- Being complied but further action needed. (Specific condition v of earlier EC).
- There have been improvements in green belt development. However, Avenue plantation on both side of haul road and green belt around bunker and surrounding area for coal stock has not been developed as per EIA/EMP report: Partially complied, efforts made for compliance but work in progress (Specific condition vi of earlier EC).
- Mitigative measures for preventing pollution in Dudhmata nala (that flows in river Barki) needs to be taken- Partially complied, action taken for compliance. (Specific condition xiii of earlier EC).
- Project proponent has submitted health check up report of around 5 K.M radius of Magadh Amrapali area for five years, from 2013-2018. Comparative analysis of the same has not been submitted by PP.
- Working hours of water tankers remain less than satisfactory. Fixed water should be provided for main haul roads dust suppression. Being complied but further action needed. (General condition vi of earlier EC).

**Condition xvi:** Action being taken for compliance but more efforts needed for compliance of this EC condition till March 2022. More plantations needs to be done along the villages and transportation route for compliance of this EC condition.

**Condition xvii:** Activity wise expenditure (on items related to CER) i.e. details of actual expenditure incurred on CER has not been submitted to this office.

**Condition xxviii:** As per the plan submitted, Honhe External OB dump is within 100m distance from Bahut Chuha nala. Catch drains and siltation ponds have been made around Honhe OB dump to prevent any silt flowing in Bahut Chuha nala.



**Condition xxviii:** Though efforts have been made for compliance of old EC conditions still there remains some conditions that are still partially complied. See specific condition xv for descriptive compliance status.

**Following conditions are being complied but further action needed:**

**Condition ii & (a) iv:** PP has also reported that copy of application made for CTE of 14.4 MTPA vide no: 7811934 dated 11.03.2020 has been submitted to JSPCB. It implies project proponent has neither received CTE for 14.4 MTPA (Peak) production nor they have valid CTO for 14.4 MTPA production till date.

**Condition iii:** Tarpaulin covering was done on the coal transportation trucks. However, there was coal spillage on coal transportation routes. It may be due to improper covering, loading of coal till the top of truck, etc. It was instructed that a free board of minimum 5 cm in all loaded vehicles/trucks along with proper covering with impervious material to prevent escape of times should be followed for all coal transportation trucks.

**Condition vii, xii, xxi & (h) ii:** PME of contractual workers should also be submitted.

**Condition viii:** Project proponent should submit skill development activities undertaken exclusively at Amrapali OCP.

**Condition xviii:** Project Proponent (PP) has submitted a copy of blasting permission obtained from DGMS (no.Ranchi area/825-27). Permission obtained was valid upto three years from the date of issue of letter but in the submitted copy date of issue of letter is not legible.

**Condition xxii, (h) v, (j) vi :** Some of the stipulations of the OM that are relevant to the project are yet to be complied completely: Inadequate provision for prevention of coal dust and OB silt material flow into Dhudhmata nala, Absence of permanent water sprinklers in main haulage road in mine, etc.

**Condition xxiii:** From the submitted data it is not clear whether the noise monitoring has been done at night or not.

**Condition xxiv & (g) i:** Project Proponent has submitted a copy of letter no. HOD(E&F)/20/1130 dated 18/02/2020 submitted to DFO, Chatra (South). In the submitted letter it was mentioned that application for EC has been made for 16.8 MTPA. However, in the preliminary conservation plan prepared by Institute of Forest Productivity, Ranchi targeted production of Amrapali OCP has been mentioned as 12.0 MTY. Project Proponent should clarify the above anomaly.

**(a) Statutory Compliance**

**Following conditions are partially complied:**

**Condition v:** Compliance same as specific condition xi.

**Condition vi:** Used oil drums were kept haphazardly without any cover/shade i.e in open space with some oil spilled on ground.

**Following conditions are being complied but further action needed:**

**Condition iii:** Project proponent(PP) should follow up and make efforts to get the site conservation plan approved by competent authority. Remaining compliance same as specific condition xxiv.



**(b) Air quality monitoring and preservation**

**Following conditions are partially complied:**

**Condition iii:** Tarpaulene covering was done on the coal transportation truck. However there was coal spillage on coal transportation routes. It may be due to improper covering, loading of coal till the top of truck, etc. It was instructed that a free board of minimum 5 cm in all loaded vehicles/trucks along with proper covering with impervious material to prevent escape of times should be followed for all coal transportation trucks. Some of fixed water sprinklers in line were not operational. Project authorities informed that due to pipe breakage some sprinklers were non operational. It was instructed to make arrangements so that water sprinklers remain operational regularly and it should be rectified as soon as some problems are encountered there. Fixed water sprinklers are also required in main coal dump area, haul roads adjacent to the coal dumps/weighbridges, haul road from mine to coal dumps/stocks other haul roads on which HEMM/trucks more frequently.

Grader/scrapper was used for leveling, cleaning of road between Amrapali Mine project and Shivpur Railway siding. But coal dust/debris has been pushed on both sides of roads. Water tankers was observed sprinkling water on the coal transportation road to Amrapali siding but it did not seem sufficient. More water tankers should be deployed on the route for water sprinkling. Road sweeping machines can also be deployed. Steps should be taken to ensure that there is no coal spillage on the road because there were village dwellings/habitations adjacent to that road who would be adversely affected by the coal dust emissions there.

Surface miner was observed in the mine that was utilised for coal breakage/excavation. However, coal dust emissions was observed during the operation of surface miner. Also during loading of coal by loaders into trucks there was a lot of coal dust emissions. Even though water tankers were utilized for wetting of coal there was coal dust emissions during coal loading.

**Condition vi:** Fixed water sprinklers were installed at one of the coal stockpile/weighbridge area but few of those sprinklers wee operational. Other fixed water sprinklers there were not operational. There were no fixed water sprinklers/rain gun, etc. at main coal dump, other weighbridges/coal stocks.

**Following conditions are being complied but further action needed:**

**Condition i & ii:** Heavy metals monitoring data of Hg, Cd, Cr has not been submitted. Spontaneous combustion was observed at one place in O/B dump. It was instructed to eliminate spontaneous combustion in the mine project area.

**Condition iv:** It is mentioned in the addendum EIA/EMP of Amrapali OCP( page no 11) that coal is being transported by trucks to Shivpur railway siding which is at a distance of 07 km from project boundary. However in the copy/pages of the mining plan submitted by PP there is no mention of coal transportation route nor any drawing/plate attached showing the route.

**(c) Water quality monitoring and preservation**

**Following conditions are partially complied:**

**Condition i:** PP should submit the Effluent water monitoring data of workshop effluent.

**Condition v:** Compliance same as specific condition xi.

**Condition vi:** Action being taken for compliance but still partially complied. Overburden material was observed in the slopes facing Dhudhmatia nala at many places . It was instructed to develop grassing and vegetation urgently on the slopes facing Dhudhmatia nala. Catch drains were made adjacent to the coal dump in such a way that there was coal transportation road between coal dump and catch drains . Depth



and width of catch drains near coal dump was not sufficient. Since there were no siltation ponds attached with those catch drains there were chances that coal dust water would flow to Dhudhmatia nala adjacent to those drains. Also, there were open places between drains for vehicle movement and coal dust would flow from there to Dhudhmatia nala. It was instructed to project authorities to make full proof arrangement, Catch drains of appropriate depth and width, siltation ponds etc. to ensure that no coal dust flows into the Dhudhmatia nala. Catch drain and siltation pond was being constructed on one side of one of the coal dump on east side of mine pit . It was instructed to increase the depth of drains there and build siltation ponds also. At least four coal dumps/coal stockpile were observed in the project. Project authorities informed that the coal dump on the east side of mine pit would be discontinued very soon and no more coal would be stocked there. For the other coal stockpiles project authorities informed that due to weighbridge coal stocks accumulates and look like coal stockpile. It was instructed to construct catch drains and siltation ponds around these coal stocks/dumps also. Project authorities also showed catch drains around coal dumps on one of the weigh bridge . On the slopes from coal weighbridge area drains were constructed and connected to a newly constructed siltation pond. This was being done for preventing coal dust flow to downside in river Barki. However civil work was yet to complete there. Some gabions may be required there for complete control of coal dust/silt flow.

**Bingalat OB dump:** Catch drains were observed on some portions of Bingalat O/B dump . However on some portions catch drains were not constructed. Siltation ponds were not constructed along with catch drains in the Bingalat O/B dump facing Bingalat village and Dhudhumatia nala. There were portions between Bingalat O/B dump and Dhudhmatia nala where catch drains siltation ponds and toe wall was not constructed and it was instructed to construct those urgently/immediately.

**Honhe OB dump:** Catch drains and siltation ponds were observed around Honhe O/B dump . Retaining wall at the toe of the dump was observed on most part of the Honhe O/B dump . Around Bingalat O/B dump, retaining wall at the toe of the dump was observed on many portions except a few portions especially along the side facing Dhudhmatia nala . Catch drains and siltation pond adjacent to the Shivpur railway siding had been silted/filled with coal dust. Also some coal dust was observed beyond the siltation pond there which means there was leakage of coal dust into the surroundings . Toe wall was observed between top soil dump and Honhe O/B dump. However there was no Catch drains/ toe wall between top soil dump and O/B dump in the south side.

**Condition viii:** Oil and grease trap was observed in the project. However, it appeared that it was not utilised for washing of HEMM/trucks there. The oil and grease trap was too small for such a large project where many HEMM and trucks were operational. Also, discharge from oil and grease trap was released from two sides into a pit that was very close to Dhudhmatia nala. There was no mechanism for water recirculation after cleaning (after elimination of oil & grease). Project authorities did not explain satisfactorily where they store the oil & grease taken out of the trap and how much quantity of oil and grease was collected for last couple of months. Project proponent should submit the Effluent water monitoring data of workshop.

**Condition xi:** A riverine/riparian ecosystem conservation and management plan has not been submitted by PP. Overburden material was observed in the slopes facing Dhudhmatia nala at many places. It was instructed to develop grassing and vegetation urgently on the slopes facing Dhudhmatia nala. Grassing and vegetation have been developed at many places on Bingalat O/B dump. However, there are still many places on the Bingalat O/B dump where grassing and vegetation has not been developed. Grassing and vegetation should be developed urgently on the sides/slopes of O/B dump facing Dhudhmatia nala and also on the remaining portions.



Catch drains were made adjacent to the coal dump in such a way that there was coal transportation road between coal dump and catch drains. Depth and width of catch drains near coal dump was not sufficient. Since there were no siltation ponds attached with these catch drains there were chances that coal dust water would flow to Dhudhmatia nala adjacent to those drains. Also, there were open places between drains for vehicle movement and coal dust would flow from there to Dhudhmatia nala. It was instructed to project authorities to make full proof arrangement, Catch drains of appropriate depth and width, siltation ponds etc. to ensure that no coal dust flows into the Dhudhmatia nala. On the slopes from coal weighbridge area, drains were constructed and connected to a newly constructed siltation pond. This was being done for preventing coal dust flow to downside in river Barki. However civil work has not been completed yet. Some gabions may be required there for complete control of coal dust/silt flow.

**Following conditions are being complied but further action needed:**

Condition ii: Environmental parameters were not displayed at suitable locations.

**(d) Noise and Vibration monitoring and prevention**

**Following conditions are being complied but further action needed:**

Condition i & iii: From the submitted data it is not clear whether the monitoring has been done at night or not. Total number of Ear plugs/Muffs provided in the year 2017, 2018, 2019 was not submitted by PP.

**(e) Mining Plan**

**Following conditions are partially complied:**

Condition iii: Project proponent did not show any effects/process in the project done for reducing energy and fuel consumption & use of renewable energy.

**Following conditions are being complied but further action needed:**

Condition ii: In the backfilled area in the lower portion vehicles plied for various activities. However it was suggested that proper slope stability studies may be done so that there is no danger from dump failures/slope failures which may lead to risk to men and machinery.

**(f) Land Reclamation**

**Following conditions are partially complied:**

Condition v: Compliance same as specific condition xiv.

**Following condition is assured to comply but further action needed:**

Condition iii: PP should submit progressive compliance status vis-à-vis the post mining land use pattern as per this EC condition.

**(g) Green Belt**

**Following conditions are partially complied:**

Condition ii: Greenbelt consisting of 3-tier plantation of width not less than 7.5 m has not been developed. Some Green belt has been developed along the major approach/coal transport roads. However, there remains many areas along the above roads where green belt has to be developed.

**(h) Public hearing and Human health issues**

**Following conditions are partially complied:**

Condition i: Project proponent has not submitted weekly illumination monitoring data.

**Following conditions are being complied but further action needed:**

Condition iii: No details have been provided regarding training provided in the year 2018 and 2019. Project proponent should explain why only 41 dust masks were issued in the year 2019 and Nil dust



masks were issued in the year 2016 and 2017. No details have been provided regarding training provided in the year 2018 and 2019.

**Condition iv:** Project authorities should take concrete steps for controlling air and water pollution as committed in Public hearing.

**(i) Corporate Environment Responsibility**

Following conditions are partially complied:

**Condition i:** Activity wise expenditure (on items related to CER) has not been submitted to this office.

**Condition ii:** In the environmental policy no details have been provided on standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/ conditions. Project authorities should also submit documents to prove that there exists system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/conditions and/or shareholders /stake holders.

**Condition iv:** Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company (duly approved by competent authority) has not been submitted by project proponent. Expenditure data on environment protection measures and year wise progress of implementation of action plan should be submitted to IRO, Ranchi.

**(j) Miscellaneous**

Following conditions are being complied but further action needed:

**Condition ii:** Date of receipt of the EC letter by Mukhiya is not mentioned.

**Condition iv:** Display of criteria pollutants or critical sectoral parameters not displayed at a convenient location for disclosure to public.

Following condition complied but timeline not followed.

**Condition i:** The advertisement has been made in "Prabhat Khabar" and in "the pioneer" on 25.07.2020.

*Rajeev Ranjan*  
23.07.20  
(Rajeev Ranjan)

Scientist E/ Additional Director



क्षेत्रीय कार्यालय सह प्रयोगशाला  
झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद  
पी०टी०सी०चौक,हजारीबाग ।

838

Regional Office cum Laboratory,  
Jharkhand State Pollution Control Board  
P.T.C.Chowk, Hazaribagh. - 825301

Ref. No. 112

Date 22/01/2021

INSPECTION REPORT - Air & Water

Date of Inspection: 21.01.2021

(A) GENERAL INFORMATION

1. Name & Address of Industry : *M/s Amrapali OCP, Magadh Amrapali Araea, C.C.I. At +PO- Tandwa , Dist-Chatra.*
- (i) New/Existing/Expansion/Modernisation : *Existing*
- (ii) Date of Commissioning : *7 th Feb. 2014*
- (iii) Large/Medium/Small : *Large*
- (iv) Red/Orange/Green : *Red.*
2. Name, Designation & Full Address with Tel. No. of:
- (i) Occupier : *Mr. V. K. Srivastava, Director Technical operation CCL. Darbhanga House, Ranchi*
- (ii) Overall Incharge Of Industry : *Mr P. N. Yadav, Project Officer*
3. Name & designation of Person (s) Present during Inspection : *Mr. Manish Sinha, Asst. Manager (Mining)*
4. Operational status: Full/Partial/Closed:
- (i) If partial, which part is closed : *Full*
5. Production capacity per day/month in tonne : *Coal - 14.4 Million Ton/Yr*
- (i) Name of product with their actual production per day/month: *Raw Coal - 10.20 Million Ton/Yr (From April to March)*
- (ii) Name of the raw material with their actual consumption per day/month in tonne : *Explosive - 6118235 Kg/Y*
6. Manufacturing Process : *Drilling, Blasting, Mining, Surface Minor then Dispatch.*

(B) WATER POLLUTION CONTROL.

1. Source of effluent generation
- | (i) Industrial : | Source                         | Quantity /KLD    |
|------------------|--------------------------------|------------------|
| (a)              | <i>Mine pit</i>                | <i>1315 KLD</i>  |
| (b)              |                                |                  |
| (ii) Domestic    | (a) <i>Workers activity</i>    | <i>1.0 KLD</i>   |
|                  | (b) <i>Colony &amp; Office</i> | <i>No colony</i> |
2. Treatment facility
- (i) Industrial: *Mine water go to the mind out pit from where it is used for water sprinkling.*
- (ii) Domestic: *Septic tank provided for sewage discharge.*

Note :- Unit obtained EC vide Ref. no. J- 11015 / 109 / 2003-IX(M) Date 20.03.2020 for enhancing production capacity from 12 MTPA to 14.4 MTPA for which unit has granted CTE (expansion) VR against CTO application has been sent vide Ref. no. 473 dtd 21.03.2020.



839

3. Operational status of E.T.P.: Full/Partial /Closed (✓)
- (i) Industrial :
- (a) If partial , which part is non -functional : ..... N.A.
- (ii) Domestic :
- (b) If partial, which part is non -functional : ..... N.A.
4. Number of outlet :
- (i) Industrial ; Nos **One**
- (a) Origin of each outlet : **Mine pit**
- (ii) Domestic : No **Nil**
- (a) Origin of each outlet : **No Colony**
5. Disposal :
- (i) Industrial :
- (a) Mode : **Through pipe**
- (b) Site : **Water sprinkling by water tanker at dusty area.**
- (ii) Domestic :
- (a) Mode : ..... **Kuchcha Nallah**
- (b) Site : ..... **Effluent used for dusty area & green belt development.**
6. Sampling :
- (i) Industrial **Done by CMPDIL (Mine Water)**
- (a) Indicate outlet as under Sl. No. -4 .....
- (b) Comparative flow condition with reference to Sl. No. B. 1 (i)  
Excessive / Normal /Negligible.....
- (ii) Domestic : **Not Done**
- (a) Indicate outlet as under Sl. No. -4 .....
- (b) Comparative flow condition with reference to Sl. No. B. 1 (i)  
Excessive / Normal /Negligible.....
7. Compliance of condition /directions:
- (i) Whether applied for consent (for period from **01.02.2021** to **31.01.2022.**) Yes / No  
If Yes : Pending with H. Q./ to be forwarded by R.O. .... Yes/No
- (ii) Discharge Consent **Applied for first time after grant of CTE expansion (14.4 MTPA).  
CTE vide H.O. Memo no. - JSPCB/HO/RNC/CTE-7811934/2021/7  
dtd - 08.01.2021.**

(A) **Specific Conditions:**

1. That, the occupier shall install, operate and maintain the systems for online monitoring of ambient air quality and continuous mine water discharge quality with connectivity to Jharkhand State Pollution Control Board and CPCB server.
2. That, the occupier shall install, operate and maintain facilities to dispose of carbonaceous hazardous and non-hazardous solid wastes for co-processing in high temperature kilns/ furnaces and shall dispose of noncarbonaceous hazardous wastes to TSDI and shall use non-carbonaceous non-hazardous solid wastes or mine overburden as a substitute of live soil or as a land fill as and where applicable...

**Compliance**

**As infored by the unit's representative the procurement of PM 10 Analyser for Amrapali OCP is at tendering stage. However Procurement of PM10 Analysers for Shivpur Siding of Amrapali OCP (Which are at close vicinity to mines) is done final installation will be completed by March 2021.**

**The waste generated during mining is OB and is stacked at OB dumps earmarked for the purpose.**



3. That, the occupier shall make arrangement of transportation of ROM to the railway siding or coal washery by pneumatic conveyer fully covered all along its way.
4. That, the occupier shall ensure the transportation of the ROM & OB through fully mechanically covered transport vehicles and in case of contractual transportation an agreement shall be made with the transporters mentioning contract of transport of materials shall be terminated with immediate effect if any vehicle at any point of time during the transportation of materials be found uncovered.
5. That, the occupier shall shift keep OB dump(s) to grey land and at least 100 mtr away from river stream water body.
6. That, the occupier shall construct toe wall and garland drain around OB dump(s) with pucca sumps having pumping back arrangement of settled run off to prevent carryover of soil and dirt with runoff into nearby water body/ stream.
7. That, the occupier shall make separate arrangement for proper storage of live soil obtained during removal of OB from the mine and reclaim decolled area with mine OB.

*As informed the condition shall be complied when construction of crusher and in-pit belt conveyors will be completed.*

*However, transportation of coal through covered dumpers/trucks is being carried to the Shivpur railway siding.*

*Agreed*

**Being Complied**

*Distance of more than 100 meter is being maintained from Barki River & nallah.*

**Complied**

*Toe wall, the catch drains & garland drains have been developed along with OB dump and siltation ponds to ensure that sediment flow in surface water is prevented. The details of drains are given below:*

a. *In the OB dump at Binglat, toe wall has been constructed 3 km length at the North-west side of the OB dump.*

b. *Construction of extended 500m length of Toe wall at first bench of Binglat OB Dump is Completed.*

c. *Construction of quarry boulder retaining wall at Honhey Ob dump is completed with garland drain for 2 Km of length.*

**Catch Drain:-**

a. *Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump.*

b. *Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.*

**Complied**

*The top soil has been preserved near Honhe OB dump.*



8. That, the occupier shall construct and maintain catch drain, siltation pond retaining wall of appropriate size to arrest silt & sediment flows from soil, OB dump and mineral dump.
9. That, the occupier shall establish well equipped environmental laboratory with facilities to monitor at least all regulatory parameters.
10. That, the occupier shall operate crushers at CHP with high efficiency bag filters, water sprinkling system to check fugitive emission.
11. That, this CTE is valid subject to compliance of EC conditions.
12. That, the occupier shall comply all the conditions of EC and CTE and submit its report to the Board on six monthly basis to the concerned organizations.
13. That, the occupier shall apply for CTO after complying all the conditions of EC and CTE alongwith the compliance report and photographs in support of the compliance.
14. That, the occupier shall not exceed the production capacity beyond the capacity as mentioned in CTE.
15. That, this CTE is subject to any further decision/direction/ order issued by MoEF in this regard.
- Complied**  
*The catch drains & garland drains have been developed along with siltation ponds to ensure that sediment flow in surface water is prevented. The details of drains are given below:*  
**Catch Drain:-**  
*a. Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump.*  
*b. Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.*  
*Ambient Air Quality monitoring as well as noise level monitoring report prepared by CMPDI for the Qtr ending June '20 & September '2020 are Assured to comply.*  
*As informed, the tender for Amrapali CHIP (12 MTY) has been LOA issued to L & T vide ref. no GM (E & M)/CHP/20/2826 - 37 dtd 31.12.2020. The project is under construction phase and shall be completed in the stipulated timeline.*
- Agree to Comply**  
*Valid Environmental Clearance vide ref no:-J-11015/109/2003-IA.II (M) dated 20.03.2020.*
- Agree to Comply**
- Agree to Comply**
- Agree to Comply**  
*As informed any further decision/ direction/order issued by MoEF in this regard will be followed.*



16. That, the occupier shall reclaim mined out areas with OB and shall plant trees on them. *As informed, Internal dumping/ Technical reclamation to the mined out area has been done from 2017-18 to 2019-20. In 2017-18, 26 Ha area was technically reclaimed, in 2018-19, 5.30 Ha of area was technically reclaimed, in 2019-20, 34.7 Ha and in 2020-21 (upto June 2020), 2 Ha of Area has been reclaimed. Till now around 25134 plants have been planted for raising of Green Belt / Block plantation. Oil & grese trap have been made in the workshop area by outsourcing company. Where Screening, Primary settling tank, Secondary settling tank with alum dosing and final tank with pump arrangement for recirculation of water for reuse. Oil and grease is being skimmed out manually from tank.*
17. That, the occupier shall install, operate & maintain ETP with workshop of heavy vehicles before applying for CTO. *Provision of ETP has been made in the workshop. Work awarded to NBCC for Construction of Workshop along with ETP for the expansion project vide No.NBCC/ED(CPG)/2020/500 Dated:13.11.2020 as informed.*
18. That, the occupier shall install CAAQMS and PM 10 analyzer within 2 months from the date of issuance of this CTE otherwise, CTO will not be considered and environmental compensation will be levied as per Act. *As informed procurement of PM 10 Analyser is at tendering stage. However Procurement of PM10 Analysers for Shivpur Siding of Amrapali OCP (Which are at close vicinity to mines) is done. Final installation will be completed by March 2021.*
19. That, the occupier shall ensure washing of tyres of vehicles used for transportation of coal and also ensure proper covering of the same to avoid any dust emission. *Washing Platform along-with Oil & grease trap have been made in the workshop area of outsourcing company.*

**(B) General Conditions :**

- (1) That, the occupier shall construct pucca (i) minimum ten feet high boundary wall and (ii) approach road and internal roads and shall keep the premises neat and clean and tidy. *Boundary wall near Mangwatongri village had been constructed & fencing of mine & sump has been done along with garland drain.*



- (2) That, the occupier shall install comprehensive enclosure (s) to cover the places of unloading of raw materials, the equipments of their processing & transferring, the places of loading of products, by products and wastes for prevention of fugitive emission and shall install such automatic inbuilt system(s) that in house dust/ gases collect(s) and undergo (es) cleaning and clean air goes out.
- (3) That, the occupier shall install such automatic inbuilt system(s) that process flue gas(es) process gas(es) and undergo(es) cleaning and clean air go(es) out through the chimney(s), having height(s) as per Central Pollution Control Board norm.
- (4) That, the occupier shall have D G Set(s) of the standard as laid in the Environment (protection) Rules, 1986 and shall install it (them) within acoustic enclosure (s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.
- (5) That, the occupier shall impart treatment as per Central Pollution Control Board text to wastewater and shall keep process effluent in close-circuit and effluent from other sources in conformity with the standard (s).
- (6) That, the occupier shall install Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge.

*At present the following mitigation measures are being undertaken for control of dust & other fugitive emissions:*

- a. *The fixed water sprinkling system over 01 Km length has been constructed at Ursu Checkpost and is kept functional on a regular basis.*
- b. *There are 16 water tankers i.e. 3 nos of 28 KL, 10 nos. of 20 KL and 3 nos. of 12 KL using 9 trips / Tankers/day.*
- c. *Around 25,134 plants have been planted for raising of Green Belt / Block plantation.*

*Not applicable.*

*All DG sets are enclosed in specified designed acoustic enclosure.*

*Agree to comply*  
*This mine was started coal production from February 2014.*  
*Presently Rain water is collected in mine pit and ponds.*  
**Ponds-**  
1. *01 no of Pond has been constructed at Honhe.*  
2. *01 no of pond has been constructed at Birhortola (Koyed).*  
3. *Construction of 1 No of pond at Ursu more is completed.*

*Check dams:-*  
(1) *Construction of 1 no check dam at Dhudhmatianallah near Binglat OB dump is Completed.*  
i) *Work awarded for making of 4 Nos of Check Dam at Amrapali Mine.*



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- (7) That, the occupier shall create new water body (ies) / remove deposit(s) of existing water body(ies) and nearby stream(s) and pond(s) and shall maintain the wholesomeness of water. *Ponds, and catch drain have been constructed for maintaining the wholesomeness of water.*
- (8) That, the occupier shall grow greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity. *Around 25134 plants have been planted for raising of Green Belt / Block plantation as informed.*
- (9) That, this CTE is valid subjected to the validity of mining Lease / Mining Plan / Ecofriendly / Environmental Clearance, if applicable. In case of no renewal of Mining Lease/ Mining Plan, this consent shall be treated as revoked automatically. *Agreed. The mine have the valid Mining plan & Environmental Clearance (14.4 MTPA) vide ref no :- J-11015/109/2003-IA. II (M), dated 20.03.2020. Agreed to comply*
- (10) That, this CTE is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force, rests with the industry/ unit/ occupier. *Agreed*
- (11) That, this CTE shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under. *Agreed to comply*
- (12) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules there under.

**(C) AIR POLLUTION CONTROL.**

- 1. Source of Emission : Boiler Furnace/ Crushing Section/ process/ specify, if any other.....  
*Drilling, Blasting, Mining and movement of heavy vehicles.*



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845

2. Pollution Control facility :
  - (i) **Water Sprinkling by tanker on road and dusty area.**
  - (ii) **Tree Plantation**
  - (iii) **Surface minor is used for coal mining for coal mining to minimize the air pollution.**
3. Operational Status of pollution control facility : Full/partial/non-functional If partial, which part is non-functional.
4. Fuel :

	Type	Quantity (t/day)
(i).	<b>H.S.D.</b>	<b>18000 Lts/day</b>
(ii)		

5. Stacks : **No Stack**

Number	Attached to	Height	Port hole (Y/N)	Platform (Y/N)	Ladder (Y/N)
(i) .....	.....	.....	.....	.....	.....
(ii) .....	.....	.....	.....	.....	.....

6. Date of last Air Monitoring : **Monitored by CMPDIL**

Stack emission	A.A.Q.	Noise
(i) .....	.....	.....

7. If D.G. Set :

Capacity (in KVA)	Housing proper improper	Height of exhaust pipe from roof in meter (m)
(i) <b>5 nos D.G set</b>	<b>Proper</b>	<b>Acoustic enclosure</b>

8. Compliance of condition/directions :

- (i) Whether applied for consent (for period from **01.07.19** to **30.06.20**) Yes / No  
If Yes : Pending with H. Q. to be forwarded by R.O. .... Yes/No
- (ii) Emission Consent : **Applied for CTO after grant of CTE Expansion (14.4 MTPS).**  
Condition(s) Compliance

9. Compliance of N.O.C. conditions/directions (Vide letter no **JSPCB/HO/RNC/CTE-7811934/2021/7 dtd - 08.01.2021**) for Emission .....

**(D) SOLID WASTE MANAGEMENT** (Other than those covered under the hazardous waste (M&H) rules, 1989)

1. Details of solid waste :

Source	Type	Quantity (t/day)	Quantity (t/day)
(i) Process <b>Mining</b>	<b>Over Burden</b>	<b>13.70 Million M<sup>3</sup>/Yr.</b>	<b>Nil</b>
(ii) Pollution control facilities			

2. Disposal :

- (i) Quantity (t/day) **Over Burden 13.70 Million M<sup>3</sup>/Yr.**
- (ii) Site **Dump in lease hold area.**
- (iii) Any other Mode .....

**(E) HAZARDOUS WASTE MANAGEMENT**

1. Details of hazardous waste:

Source	Type	Quantity (t/day)	Quantity (t/day)
(i) Process	<b>Waste Oil</b>	<b>50 Lts/month</b>	<b>Nil</b>
	<b>Discarded Batteries</b>	<b>1 Nos/M</b>	
(ii) Pollution Control facilities			

2. Mode of treatment : **2 Nos/month**

3. Storage : **Waste Oil - 50 L/M** .t/day. How **Kept in M.S.**
- Discarded Batteries - 1 No/M**



846

4. Disposal :

(i) Quantity t/day (i) 50 L/M (ii) 1 Nos /month

(ii) Site Sent to original manufacture co.

5. Whether authorisation obtained :Yes/No Authorisation from June, 14 to June, 2019..

6. Compliance of conditions / directions :

(F) WATER CESS

1. Source of water supply & quantity (in KLD)

Industrial	Domestic	Processing	Processing
Cooling Spraying	purpose	whereby water	whereby water
in mine pits or		gets polluted	gets polluted &
boiler feed.		& the	the pollutants
		pollutants are	are not easily
		easily	biodegradable
		biodegradable	& are toxic

(i) Municipal water

Supply Mains ..... 2 KLD

(ii) Well/Tube-well

(iii) Canal

(iv) River

(v) Any other 1315 KLD

Mine

2. Method of measurement :

Water meter / Venturi meter / Notch /  
Orifice meter / any other As informed  
Functional / Non-functional

3. Operational status of measuring devices

4. Last date of water cess paid

(G) LAND AVAILABLE FOR GREEN BELT DEVELOPMENT

(i) Existing Tree Plantation has been done..Sq.m

(ii) Available for future development .....Sufficient.....Sq.m

(H) PUBLIC COMPLAINTS (if any ) Yes

1. Nature of complaint Regarding air pollution due to transportation of trucks

2. Number of residential units within 100( mt...)the boundary of the unit :

(I) COMMENTS OF :

(A)INSPECTING OFFICER : (Name R. N. Anjan Desig. A.S.O.

(i) Recommendation for Consent : Unit has not installed the PM10 analyzer. In the light of above facts necessary decision of Consent to operate may be taken.

22/01/2021  
(R. N. Anjan)  
A.S.O.

2. Regional Officer's Recommendation :

(i) Consent : As above



22/01/2021  
Ashok Kumar Yadav  
R.O.

847

**Compliance Report of EC Vide Letter No J-11015/109/2003-IA. II (M)**  
**Dated 20.03.2020 in respect of AMRAPALI PROJECT (14.4MTPA) of Magadh -**  
**Amrapali Area,CCL**

S. No	EC Specific Condition	Compliance
(i)	EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.	<i>Agreed</i>
(ii)	The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 14.4 MTPA (Peak) prior to commencement of the increased production	<i>Applied for CTO</i>
(iii)	Transportation of coal from Coal Handling Plant shall be through covered trucks.	<i>As informed, the tender for Amrapali CHP (12 MTY) has been LOA issued to L &amp; T vide ref. no GM (E &amp; M)/CHP/20/2826 - 37 dtd 31.12.2020. The project is under construction phase and shall be completed in the stipulated timeline.</i>
(iv)	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.	<i>As informed, the tender for Amrapali CHP (12 MTY) has been LOA issued to L &amp; T</i>
(v)	PP shall implement in-pit conveyor to railway siding through silo loading in three years.	<i>Agreed.</i>
(vi)	Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.	<i>Water Spraying is being done.</i>
(vii)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	<i>Unit is complying as inform.</i>
(viii)	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	<i>Such types of training are being given.</i>
(ix)	Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate, check the dust pollution	<i>Partly Complied</i>
(x)	Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.	<i>Agreed</i>
(xi)	The company shall obtain approval of CGWA for use of groundwater for mining operations at its	<i>Application for obtaining NOC from CGWA has been submitted.</i>



	enhanced capacity of 14.4 MTPA (Peak).	
(xii)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	<i>Being Complied</i>
(xiii)	A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/III or any other expert agency identified by the Ministry.	<i>It will be complied.</i>
(xiv)	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles	<i>Being Complied</i>
(xv)	Compliance of the non-compliance/partial compliance conditions certified by Regional Office, Nagpur vide its Letter dated 4th December, 2019. The PP shall complete all non-compliance/partial compliance conditions in one year and the Action taken report shall be submitted to the Regional Office of the MoEF&CC.	<i>Agreed</i>
(xvi)	Project proponent to plant 100,000 nos. of native trees with broad leaves along the 100,000 nos. of native trees with broad leaves along the villages and 50,000 nos of native trees along transportation route to prevent the effect of air pollution in 2 years. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.	<i>It will be complied.</i>
(xvii)	The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1 <sup>st</sup> May, 2018.	<i>Agreed</i>
(xviii)	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.	<i>Assured</i>
(xix)	The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.	<i>Agreed</i>



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(xx)	Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board	<i>Agreed</i>
(xxi)	Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also. Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antsnakevenom including all other paramedical safeguards may be ensured before initiating the mining activities.	<i>Being carried out.</i>
(xxii)	Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-1A.11 (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".	<i>Assured to comply</i>
(xxiii)	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light night hours.	<i>It is being Complied</i>
(xxiv)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be	<i>DFO Chatra (South) has been requested for preparation of Wild Life Conservation Plan vide letter no. PO(A)/PD/2018-19/2025 dated 25.12.2018.</i>



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	prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.	
(xxv)	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit-for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.	<i>It will be complied as inform.</i>
(xxvi)	Amrapali Railway siding shall be completed in 3 years and road transportation to Balumath railway siding will be stopped accordingly.	<i>Agreed.</i>
(xxvii)	The distance of atleast 100 m shall be kept from Barki River and Bahut Chuhanalawith no mine water discharge.	<i>Complied</i>
(xxviii)	Project Proponent shall comply to the observation in show cause notice dated 12 <sup>th</sup> December, 2018 regarding non-compliance of earlier EC and necessary report should be submitted to the Regional Office, Ranchi within stipulated time.	<i>Agreed.</i>
7.1	<b>Standard EC Conditions</b>	<i>Compliance</i>
(a)	<b>Statutory compliance</b>	
(i)	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project	<i>Complied</i>
(ii)	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	<i>Not Applicable</i>
(iii)	The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).	<i>DFO Chatra (South) has been requested for preparation of Wild Life Conservation Plan vide letter no. PO(A)/PD/2018-19/2025 dated 25.12.2018 as informed.</i>
(iv)	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	<i>Agreed</i>
(v)	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	<i>Agreed</i>



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(vi)	Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules,2016.	<i>Being Complied</i>
(b)	<b>Air quality monitoring and preservation\</b>	
(i)	Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM25, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.	<i>Complied.</i>
(ii)	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB-SPCB.	<i>Complied.</i>
(iii)	Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM25) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.	<i>Complied.</i>
(iv)	The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.	<i>Complied.</i>
(v)	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining PUC certificate from the authorized pollution testing centres.	<i>Complied.</i>
(vi)	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side	<i>Water sprinkling is done for dust suppression. Drills are wet operated.</i>



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	cladding all along the conveyor gantry should be made to avoid airborne dust. Drills shall be wet operated or fitted with dust extractors.	
(vii)	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.	<i>Not applicable.</i>
(c)	<b>Water quality monitoring and preservation</b>	
(i)	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (I) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.	<i>Agreed</i>
(ii)	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	<i>Complied.</i>
(iii)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.	<i>Piezometer data is being recorded.</i>
(iv)	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	<i>Complied</i>
(v)	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	<i>Being Complied</i>
(vi)	Catch and/or garland drains and siltation ponds in adequate numbers and appropriate sizes shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.	<ul style="list-style-type: none"> <li>i. <i>The desiltation of catch drain has been carried out.</i></li> <li>ii. <i>Total length of Garland drain required is 5.25 Km out of which 2 Km is constructed. Remaining 3.25 Km is being constructed.</i></li> <li>iii. <i>Total number of siltation pond under construction is 3.</i></li> <li>iv. <i>Total number of settling tank required is 5 out of which 4 no of settling tank has been constructed.</i></li> </ul> <p><i>Action Plan:</i></p> <ul style="list-style-type: none"> <li>a) <i>Making catch drain and siltation pond around OB dump at Honhey. Timeline:</i></li> </ul>

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		<p><i>June-2020.</i></p> <p><i>b) Making catch drain and siltation pond around OB dump at Binglat. Timeline: June-2020.</i></p> <p><i>c) Making catch drain and siltation pond around coal stock Timeline: June-2020.</i></p>
(vii)	Adequate groundwater recharge measures shall be taken up for augmentation of groundwater. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).	<p><i>i. Construction of 1 no check dam at Dhudmatiananallah near Binglat OB dump is completed.</i></p> <p><i>ii. Additional 4 no of checkdam is proposed.</i></p> <p><i>iii. 1 no each pond constructed at Honhe, Birhortola&amp;Ursu more has been completed.</i></p> <p><i>Action Plan:</i></p> <p><i>a) Rain water harvesting system at Project office &amp; executive hostel.</i></p> <p><i>a) Construction of 4 no additional checkdams. Timeline: June-2020.</i></p>
(viii)	Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.	<i>i. No CHP and township have constructed.</i>
(ix)	The water pumped out from the mine, after siltation, shall be utilized for industrialpurpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.	<i>Complied.</i>
(x)	The surface drainage plan including surface water conservation plan for the area ofinfluence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc. shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.	<i>Agreed</i>
(xi)	The project proponent shall take all precautionary measures to ensure riverine riparianecosystem in and around the coal mine up to a distance of 5 km. A riverine /riparianecosystem conservation and management plan should be prepared and implemented inconultation with the irrigation / water resource department in the state government.	<i>Agreed</i>



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<b>(d)</b>	<b>Noise and Vibration monitoring and prevention</b>	
(i)	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.	<i>Complied</i>
(ii)	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations. Fly rocks, noise and air blast etc. as per the guidelines prescribed by the DGMS.	<i>Complied</i>
(iii)	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.	<i>Complied</i>
<b>(e)</b>	<b>Mining Plan</b>	
(i)	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.	<i>Complied</i>
(ii)	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS)	<i>Complied</i>
(iv)	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	
<b>(f)</b>	<b>Land Reclamation</b>	
I	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).	<i>Complied as report</i>
(ii)	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.	<i>Assured to comply</i>
(iii)	The entire excavated area, backfilling, external OS dumping (including top soil) and afforestation plan shall be in conformity with the "during mining", "post mining" land-use pattern, which is an integral part of the approved	<i>Assured to comply</i>



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	Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.	
(iv)	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines.	<i>Not Applicable</i>
(v)	Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	<i>The top soil has been preserved near Honhe OB dump.</i>
(vi)	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	<i>Agreed.</i>
(g)	<b>Green Belt</b>	
(i)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	<i>DFO was requested for preparation of wild life conservation plan through a letter vide ref no:- PO(A)/PD/2018-19/2025 dated 25.12.18. as reported by the units.</i>
(ii)	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. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the	<i>It is being complied</i>



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	major approach/ coal transportation roads.	
<b>(h)</b>	<b>Public hearing and Human health issues</b>	
(i)	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.	<i>Proper illumination maintained in mines and nearby location.</i>
(ii)	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.	<i>IME and PME health camps held. No occupational disease diagnosed. As reported.</i>
(iii)	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	<i>Being Complied</i>
(iv)	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable	<i>Agreed.</i>
(v)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	<i>Agreed.</i>
<b>(i)</b>	<b>Corporate Environment Responsibility</b>	
(i)	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-1A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	<i>Assured to comply</i>
(ii)	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental forest/wildlife norms/conditions. The company shall have defined system of reporting infrinements deviation/violation of the environmental forest/wildlife norms conditions and/or shareholders/stake holders.	<i>Assured to comply</i>
(iii)	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Exec	<i>Being Complied</i>



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	who will directly to the head of the organization.	
(iv)	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry Regional Office along with the Six Monthly Compliance Report.	<i>Agreed.</i>
(v)	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	<i>Complied</i>
(j)	<b>Miscellaneous</b>	
(i)	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	<i>Followed.</i>
(ii)	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	<i>Assured to comply</i>
(iii)	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half yearly basis.	<i>Complied..</i>
(iv)	The project proponent shall monitor the criteria pollutants level namely: PK <sup>o</sup> , SO <sub>2</sub> , NO <sub>x</sub> (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	<i>Being Complied</i>
(v)	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	<i>Agreed.</i>
(vi)	The project proponent shall follow the mitigation measures provided in this Ministry's SOM No.Z-11013/5712014-1A, II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	<i>Agreed</i>
(vii)	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	<i>Being Complied</i>



viii	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.	Agreed.
ix	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Agreed
x	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Agreed
xi	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.	Assured to comply
xii	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agreed.
xiii	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed.
xiv	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed
xv	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information monitoring reports.	Agreed
xvi	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Agreed.
8	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.	Will be complied.
9	The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.	Agreed
10	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Agreed
11	The coal company/project proponent shall be liable to the compensation against the illegal mining, if any.	Agreed



	raised by the respective State Governments at any point of time, in terms of the orders dated 2nd August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.	
12	The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.	Agreed.
13	This Environment Clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.	Agreed.
14	This issues in supersession of the earlier EC granted vide letter dated 14th January, 2006 and 28th February, 2020.	Agreed

*[Signature]*  
22/01/2021  
(R. N. Anjaan)  
A.S.O.  
*[Signature]*



क्षेत्रीय कार्यालय सह प्रयोगशाला  
झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद  
पी.टी.सी. चौक, हजारीबाग ।

Regional Office cum Laboratory,  
Jharkhand State Pollution Control Board  
P.T.C.Chowk, Hazaribagh. - 825301

ANNEXURE-D

860

Ref. No. 1434

Date 16/12/21

INSPECTION REPORT - Air & Water

Date of Inspection: 12.12.2021

(A) GENERAL INFORMATION

1. Name & Address of Industry : *M/s Amrapali OCP, Magadh Amrapali Araea, C.C.L. At +PO- Tandwa , Dist-Chatra.*
- (i) New/Existing/Expansion/Modernisation : *Existing*
- (ii) Date of Commissioning : *7 th Feb. 2014*
- (iii) Large/Medium/Small : *Large*
- (iv) Red/Orange/Green : *Red.*
2. Name, Designation & Full Address with Tel. No. of :
- (i) Occupier : *Sri Bhola Singh,, Ditractor Technical operation CCL Darbhanga House, Ranchi*
- (ii) Overall Incharge Of Industry : *Mr P. N. Yadav, Project Officer*
3. Name & designation of Person (s) Present during Inspection : *Mr. Manish Sinha, Asst. Maneger (Mining)*
4. Operational status : Full/ Partial/Closed
- (i) If partial , which part is closed : *Full*
5. Production capacity per day/month in tonne : *Coal - 14.4 Million Ton/Yr*
- (i) Name of product with their actual production per day/month: *Raw Coal - 10.20 Million Ton/Yr (From April to March)*
- (ii) Name of the raw material with their actual consumption per day / month in tonne : *Explosive - 6118235 Kg/Y*
6. Manufacturing Process : *Drilling, Blasting, Mining, Surface Minor then Dispatch.*

(B) WATER POLLUTION CONTROL

1. Source of effluent generation
- (i) Industrial :
- | Source                         | Quantity /KLD    |
|--------------------------------|------------------|
| (a) <i>Mine pit</i>            | <i>1315 KLD</i>  |
| (b)                            |                  |
| (ii) Domestic                  |                  |
| (a) <i>Workers activity</i>    | <i>1.0 KLD</i>   |
| (b) <i>Colony &amp; Office</i> | <i>No colony</i> |
2. Treatment facility
- (i) Industrial : *Mine water go to the mind out pit from where it is used for water sprinkling.*
- (ii) Domestic : *Septic tank provided for sewage discharge.*

Note :- Unit obtained EC vide Ref. no. J - 11015 / 109 / 2003-IA(M) Date 20.03.2020 for enhancing production capacity from 12 MTPA to 14.4 MTPA for which unit has granted CTE (e) against CTO application has been sent vide Ref. no. 473 dtd 21.03.2020.



3. Operational status of E.T.P.; Full/Partial /Closed (?)
- (i) Industrial :
- (a) If partial , which part is non - functional : .....N.A.,
- (ii) Domestic :
- (b) If partial, which part is non -functional : ..... N.A.,
4. Number of outlet :
- (i) Industrial ; Nos **One**
- (a) Origin of each outlet :. **Mine pit**
- (ii) Domestic ; No **Nil**
- (a) Origin of each outlet : **No Colony**
5. Disposal :
- (i) Industrial :
- (a) Mode : **Through pipe**
- (b) Site : **Water sprinkling by water tanker at dusty area.**
- (ii) Domestic :
- (a) Mode : ..... **Kuchcha Nallah**
- (b) Site : ..... **Effluent used for dusty area & green belt development.**
6. Sampling :
- (i) Industrial **Done by CMPDIL (Mine Water)**
- (a) Indicate outlet as under Sl . No. -4 .....
- (b) Comparative flow condition with refrence to Sl. No. B. 1 (i) Excessive / Normal /Negligible.....
- (ii) Domestic : **Not Done**
- (a) Indicate outlet as under Sl . No. -4 .....
- (b) Comparative flow condition with refrence to Sl. No. B. 1 (i) Excessive / Normal /Negligible.....
7. Compliance of condition /directions ;
- (i) Whether applied for consent (for period from .01.01.2022. to .31.12.2022. ) Yes /No  
If Yes : Pending with H. Q./ to be forwarded by R.O. .... Yes /No
- (ii) Discharge Consent **Applied for CTO vide H.O. Memo no. - JSPCB/HO/RNC/CTO-9781012/2021/284 did - 15.02.2021 valid upto 31.12.2021.**

**(A) Specific Conditions:**

1. That, the occupier shall reclaim mined out areas with OB and shall plant trees on them.

**Compliance**

\*Internal dumping/ Technical reclamation to the mined out area of Amrapali OCP has been done from 2017-18 to 2019-20. In 2017-18, 26 Ha area was technically reclaimed, in 2018-19, 5.30 Ha of area was technically reclaimed, in 2019-20, 34.7 Ha and in 2020-21 35 Ha of area has been backfilled.

\*From begaining to the monsoon 2021, total approx 90,000 trees have been planted and being maintain.

\*In Monsoon 2020, spread the Seed balls for raising of green belt in Binglat OB dump and for top soil preservation at Honhe OB dump. Work is completed at Binglat OB dump area.



2. That the occupier shall construct catch drain siltation pond retaining wall of appropriate size to arrest silt & sediment flows from OB dump and mineral dump

**Complied.**

**Toe Wall**

- a. In the OB dump at Binglat, toe wall has been constructed 1 km length at the North-west side of the OB dump.  
b. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.  
c. Construction of quarry boulder retaining wall at Honhe OB dump is completed with garland drain for 2 Km of length.

**Catch drain**

- a. Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump. Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.

3. That the occupier shall do Over Burden management properly as prescribed in environment clearance.

OB DUMP has been stacked at earmarked dumpsite with proper terracing and maintenance of slope as per statutory provisions.

4. That the occupier shall operate crushers at CHP with high efficiency bag filters water sprinkling system to check fugitive emission

Not Complied

Work awarded to M/s Larsen and Turbo Limited on 31.12.2020. The team of M/s Larsen & Turbo visited the site with Project Engineer E&M for survey as informed by the unit's representative.

5. That, the occupier shall operate and maintain ETP with workshop of heavy vehicles.

Being complied

6. That, the occupier shall inform to Regional Office – Cum –Lab, Hazaribagh and Head Office JSPCB Board at Ranchi within 24 hrs from the time of Closure or opening of the plant.

Agreed

7. That, the occupier shall if be found violating the Consent to Operate at any point of time during inspection of the plant by the competent authority, the consent to operate shall be revoked as per provision of the acts.

Agreed

8. That the occupier shall not exceed the production capacity beyond the capacity as mentioned in CTO.

Agreed

9. That, this CTO is subject to any further ecision/ direction/order/ issued by MoEF&CC in this regard.

Complied.

10. That the occupier shall ensure the transportation of the ROM & OB through fully mechanically covered transport vehicles and in case of contractual transportation an agreement shall be made with the transporters mentioning contract of transport

Agreed and complied.



materials shall be terminated with immediate effect if any vehicle at point of time during the transportation of materials be found uncovered.

11. That the occupier shall construct and maintain catch drain siltation pond retaining wall of appropriate size to arrest silt & sediment flows from soil, OB dump and mineral dump.
12. That the occupier shall operate crushes at CHP with high efficiency bag filters water sprinkling system to check fugitive emission.
13. That the occupier shall comply all the conditions of EC and CTO and submit its report to the board on six monthly along with the recent analysis reports.
14. That the occupier shall install, operate & maintain ETP with workshop of heavy vehicles.
15. That the occupier shall construct toe wall and garland drain around the OB dump.

#### Catch drain

- \* Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump.
- \* Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.

#### Toe Wall

- a. At Binglat OB dump, toe wall has been constructed 1 km length at the North-west side of the OB dump.
  - b. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.
- Construction of quarry boulder retaining wall at Honhe Ob dump is completed with garland drain for 2 Km of length. Work awarded to M/s Larsen and Turbo Limited on 31.12.2020. The team of M/s Larsen & Turbo visited the site with Project Engineer E&M for survey. Agreed and complying.

Oil & grease trap have been made in the workshop area of outsourcing company. An another ETP is proposed in the workshop. Work awarded to NBCC for Construction of Workshop along with ETP for the expansion project vide No.NBCC/ED(CPG)/2020/500 Dated:13.11.2020.

#### Complied.

#### Toe Wall

- a. In the OB dump at Binglat, toe wall has been constructed 1 km length at the North-west side of the OB dump.
- b. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.
- c. Construction of quarry boulder retaining wall at Honhe OB dump is completed with garland drain for 2 Km of length. .

#### Catch drain

- a. Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at



16. That, the occupier shall install, operate and maintain the system for online monitoring of ambient air quality and continuous mine water discharge quality with connectivity to Jharkhand State Pollution Control Board and CPCB server.
17. That the occupier shall install, operate and maintain facilities to dispose of carbonaceous hazardous and non-hazardous solid wastes for co-processing in high temperature kilns/furnaces and shall dispose of non-carbonaceous hazardous wastes to TSDF and shall use non-carbonaceous non-hazardous solid wastes or mine overburden as a substitute of live soil or as a land fill as and where applicable.
18. That the occupier shall make arrangement of transportation of ROM to the railway siding or coal washery by pneumatic conveyer fully covered all along its way.
19. That the occupier shall/keep OB dump (s) to grey land and at least 100mtr away from river/stream/water body.
20. That the occupier shall construct toe wall and garland drain around OB dump(s) with pucca sumps having pumping back arrangement of settled run off to prevent carryover of soil and dirt with runoff into nearby water body/system.

Northwest side of Binglat OB Dump.  
Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is complete

- PM 10 Analyzer installed.
- The procurement of CAAQMS system at Project Office (Core Zone of Amrapali OCP) & Project Office of Magadh OCP(Buffer zone of Amrapali OCP) is also under progress from GeM portal of Govt. of India as informed.

The waste generated during mining is OB and is stacked in OB dumps earmarked for the purpose.

Assured to comply

**Being Complied**

Distance of more than 100 meter is being maintained from Barki River & nallah.

**Complied.**

**Toe Wall**

- In the OB dump at Binglat, toe wall has been constructed 1 km length at the North-west side of the OB dump.
- Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.
- Construction of quarry boulder retaining wall at Honhe OB dump is completed with garland drain for 2 Km of length. .

**Catch drain**

- Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump. Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.



21. That the occupier shall make separate arrangement for proper storage of live soil obtained during area with mine OB. Complied  
The top soil (2.6 L m3) has been preserved near Honhe OB dump. It shall be laid as per top soil management plan when the OB dump will reach its designed height. Top soil is being spread over 23 Ha reclaimed/ backfilled area for Monsoon plantation 2021. removal of OB from the mine and reclaim decoaled
22. That the occupier shall establish well equipped environment laboratory with facilities to monitor at least all regulatory parameters. Coal India have own lab. Named M/s CMPDIL for the monitoring work.
23. That the occupier shall ensure washing of wheels of the vehicles used for transportation of coal to mitigate fugitive emission. Agreed
24. That the occupier shall ensure installation and start operationalization of CAAQMS and PM 10 analyzer within 2 months from date of issuance of this CTO failing which CTO may be revoked and environmental compensation may be levied as per the norms. The procurement of CAAQMS system at Project Office of Amrapali OCP (Core Zone of Amrapali OCP).
25. That the occupier shall submit application for renewal of consent under section 25/26 of the water (prevention&Control of Pollution) Act, 1974 and under section 21 of the Air (prevention & Control of pollution) Act, 1981 again 120 days prior to the date of expiry of this consent with requisite fee and documents showing compliance of all of the above condition. Agreed
26. That this CTO supersedes the CTO granted vide Ref.No JSPCB/HO/RNC/CTO-6645615/2020/1408, Dated 01.09. 2020. Agreed

**(B) General Condition.**

- (1) That, the occupier shall maintain the ambient air quality within the standard given below : **Compliance**  
Coal India have own lab. Named M/s CMPDIL for the monitoring work. Standards are maintained and test report attached for the quarter ending December 2020 & March '2021 as Annexure I. Maintained. Time to time monitoring has been done by CMPDIL Ranchi
- (2) That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:

S N	Parameter	Standard
1	Particulate Matter	150 mg/Nm <sup>3</sup>

- (3) That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

S N	Parameter	Standard
1	Total Suspended Solids	100 mg/L
2	BOD	30 mg/L





3	COD	250 mg/L
4	Oil & Grease	10 mg/L
(4)	That, the occupier shall dispose of solid wastes as follows:	
S N	Waste Type	Mode of Disposal
1	Hazardous Carbonaceous Wastes	In co-processing in hightemperature furnaces or kilns
2	Hazardous Non-Carbonaceous Wastes	In TSDF

The waste generated during mining is OB and is stacked in OB dumps earmarked for the purpose

3	Non-Carbonaceous Non- Hazardous solid wastes/ Mine Over Burden	As a substitute of Soil or Mineral
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(5) That, the occupier shall keep D G Set(s) within acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

**Complied**

(6) That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge and submit the photographic view of the structures within a month.

**Rainwater Harvesting:-**

i) Work Completed for installation & Construction of rainwater harvesting system at PO office and Executive Hostel of Amrapali Project and proposed at VTC near PO Office as well as 15 th no. of Rain water Harvesting system in process. Check Dams 5 nos. and 3 nos. pond have been constructed.

(7) That, the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

\*From begaining to the monsoon 2021, approx 90,000 trees have been planted and being maintain.

\*In Monsoon 2020, spread the Seed balls for raising of Green belt in Binglat OB dump and for top soil preservation at Honhe OB dump. Work is completed at Binglat OB dump area.

(8) That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year latest by 30th September of the next financial year.

**Complied.**

Environmental Statement for 2020 has been submitted to Board.

(9) That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph 3 of this CTO yearly at required periodicity.

Monitoring is done by CMPDI which is an NABL accredited laboratory. The report for the quarter ending December 2020 and March '21 is attached as Annexure- I.

(10) That, this CTO is valid subjected to the validity of mining Lease/Mining Plan/Ecofriendly/Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.

**Agreed**

(11) That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the timebeing in force, rests with the industry/ unit/ occupier.

**Agreed**

(12) That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.

**Agreed**



867

- (13) That, the occupier shall comply with all applicable provisions of **Agreed** the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules made there under.

(C) **AIR POLLUTION CONTROL**

1. Source of Emission : Boiler/Furnace/Crushing Section/process/specify,if any other.....  
**Drilling, Blasting, Mining and movement of heavy vehicles.**

2. Pollution Control facility :

- (i) **Water Sprinkling by tanker on road and dusty area.**
- (ii) **Tree Plantation**
- (iii) **Surface minor is used for coal mining for coal mining to minimize the air pollution.**

3. Operational Status of pollutioncontrol facility : Full/partial/non-functional If partial ,which part is non-functional.

4. Fuel :

(i).	Type <b>H.S.D.</b>	Quantity ( t/day) <b>18000 Lts/day</b>
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5. Stacks : **No Stack**

Number	Attached to	Height	Port hole (Y/N)	Platform (Y/N)	Ladder (Y/N)
(i) .....	.....	.....	.....	.....	.....

6. Date of last Air Monitoring : **Monitored by CMPDIL**

Stack emission	A.A.Q.	Noise
(i) .....	.....	.....

7. If D.G.Set :

Capacity (in KVA)	Housing proper improper	Height of exhaust pipe from roof in meter (m)
(i) <b>5 nos D.G set</b>	<b>Proper</b>	<b>Acoustic enclosure</b>

8. Compliance of condition /directions ;

(i) Whether applied for consent (for period from **01.01.22** to **31.12.22**) Yes/ No  
If Yes : Pending with H. Q./ to be forwarded by R.O. .... Yes/No

(ii) Emission Consent ; **Applied for CTO vide H.O. Memo no. - JSPCB/HO/RNC/CTO-9781012/2021/284 dtd - 15.02.2021 valid upto 31.12.2021.**

Condition (s)	Compliance
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9. Compliance of N.O.C. conditions/directions (Vide letter no ..... **dtd** .....) for Emission .....

(D) **SOLID WASTE MANAGEMENT** (Other than those covered under the hazardous waste (M&H) rules, 1989

1. Details of solid waste :

Source	Type	Quantity (t/day)	Quantity (t/day)
(i) Process <b>Mining</b>	<b>Over Burden</b>	<b>13.70 Million M<sup>3</sup>/Yr.</b>	<b>Nil</b>
(ii) Pollution control facilities			

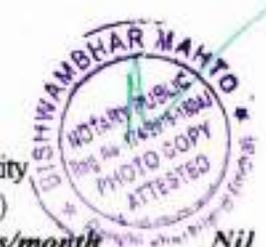
2. Disposal :

- (i) Quantity (t/day) **Over Burden 13.70 Million M<sup>3</sup>/Yr.**
- (ii) Site **Dump in lease hold area.**
- (iii) Any other Mode .....

(E) **HAZARDOUS WASTE MANAGEMENT**

1. Details of hazardous waste:

Source	Type	Quantity (t/day)	Quantity (t/day)
(i) Process	<b>Waste Oil</b>	<b>50 Lts/month</b>	<b>Nil</b>
	<b>Discarded Batteries</b>	<b>1 Nos/M</b>	



868

(ii) Pollution Control facilities...2 Nos /month

2. Mode of treatment : .....
- 3.Storage : **Waste Oil - 50 L/M** ,t/day. How **Kept in M.S. Drums.**  
**Discarded Battries - 1 No/M**
- 4.Disposal :
  - (i)Q uantity t/day **(i) 50 L/M** **(ii) 1 Nos /month**
  - (ii) Site **Sent to origanal manufacture co.**
5. Whether authorisation obtained :Yes/No **Authorisation from June, 14 to June, 2019..**
- 6.Compliance of conditions/ directions :

(F) WATER CESS

1. Source of water supply & quantity (in KLD)

	Industrial Cooling Spraying in mine pits or boiler feed.	Domestic purpose	Processing whereby water gets polluted & the pollutants are easily biodegradable	Processing whereby water gets polluted & the pollutants are not easily biodegradable &are toxic
(i) Municipal water Supply Mains	.....	<b>2 KLD</b>	.....	.....
(ii) Well/Tube-well	.....	.....	.....	.....
(iii) Canal	.....	.....	.....	.....
(iv) River	.....	.....	.....	.....
(v) Any other <b>Mine</b>	<b>1315 KLD</b>	.....	.....	.....

2. Method of measurement :

Water meter / Venturi meter/Notch/  
Orifice meter / any other **As informed**  
Functional /Non-functional

3 Operational status of measuring devices

4.Laste date of water cess paid

(G) LAND AVAILABLE FOR GREEN BELT DEVELOPMENT

- (i) Existing **Tree Plantation has been done..**Sq.m
- (ii) Available for future development .....**Sufficient**.....Sq.m

(H) PUBLIC COMPLAINTS (if any ) Yes

1. Nature of complaint **Regarding air pollution due to transportation of trucks**
2. Number of residential units within 100( mt...)the boundary of the unit :

(I) COMMENTS OF :

(A)INSPECTING OFFICER : (Name **R. N. Anjaan** Desig. **A.S.O.**

- (i) Recommendation for Consent : **Unit has not installed the PM10 analyzer. CAAQMS and not installed CHP & Silo. In the light of above facts show cause may be asked.**

*(Signature)*  
15/12/2021  
(R. N. Anjaan)  
A.S.O.

2. Regional Officer's Recommendation :

- (i) Consent : **As above**

*(Signature)*  
15/12/2021  
(Ashok Kumar Yadav)  
R.O.



869

**Compliance Report of EC Vide Letter No J-11015/109/2003-IA. II (M) Dated 10.05.2020 in respect of M/s AMRAPALI OCP (20.16 MTPA) of Amrapali & Chandragupta Area, CCL in an area of 619.87 Ha.**

SN	Specific Condition	Compliance
i	The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 20.16 MTPA (Peak) prior to commencement of the increased production	Applied for CTE.
ii	All the non-compliance conditions stipulated in earlier ECs shall be complied within 4 months.	Being Complied
iii	Further expansion shall be considered only after the completion of mitigation measures proposed by PP during EAC presentation based on recommendation of Ministry's Regional Office.	Agreed.
iv	All the 3 continuous air quality monitoring station should be made operation within 2 months from the date of issue of this letter and the real time data so generated to be uploaded on company website. In addition, data should also be displayed digitally at entry and exist gate of mine lease area for public display.	Assured to comply Continuous air quality monitoring station for Amrapali OCP is under Procurement.
v	Adequate effectiveness of EMP should be analyzed from the offset/hike of air pollution data from continuous monitoring station and quarterly report shall be generated and submitted with 6 monthly compliance reports to RO, MoEF&CC.	Assured to comply.
vi	The PP shall complete all non-compliance/ partial compliance in one year and the action taken report shall be submitted to Regional Office of the MOEF&CC	Assured to comply
vii	Quality of polluted water generated from the operations which include COD and acid mine drainage and metal contamination shall be monitored along with TDS, DO, TSS. The monitored data shall be uploaded on the website of the company as well as displayed at the site in public domain.	Being complied Monitoring of Effluent is being done & report prepared by CMPDI for the Qtr ending December '20 & March '2021 are attached as <b>Annexure-4</b> .
viii	PP shall submit a third party assessment of EC Compliance shall be undertaken once in three years through agency like ICFRI/ NEERI/IIT or any other expert agency identified by the Ministry to Ministry's Regional Office.	Assured to comply As directed, a third party assessment shall be carried out for Amrapali OCP undertaken once in three years through experts agency recognized by MoEF&CC. Unit has moved the proposal to NEERI Nagpur.
ix	Continuous Monitoring at Occupational safety and health hazards and the Corrective action	Being Complied



	need to be ensured.	
X	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	<b>Being complied</b> The training on livelihood and skill development is regularly been undertaken in CCL & Amrapali area for making nearby villagers more employable as informed.
Xi	PP to plant 100,000 nos. of Sal trees only and develop nursery of 5 ha sal trees for free distribution in nearby areas.	<b>Being Complied</b>
Xii	Mining shall be carried out only by surface miners for the project (as proposed) and silo loading till railway siding through in-pit conveyor should be installed to avoid road.	<b>Not installed.</b> The work for Amrapali CHP & Silo has been awarded to M/s Larsen and Turbo Limited on 31.12.2020.
Xiii	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.	<b>Agreed.</b> Continuous development of green belt, regressing & vegetation is being practiced every year in Monsoon departmentally and by State Forest department on backfilled area or available locations. Grass matting using Guinea grass, Charabadam and Johnson grass have been done on the barren portion of Honhe O/B dump in 2020.
Xiv	PP should opt specific mitigative measures for the straightening of Dudhmatia stream Regular monitoring of the flow rate of Dudhmatia stream shall be carried out and record maintain	<b>Assured to comply.</b>
Xv	PP should ensure that coal transportation from Amrapali Railway Siding through belt conveyor (within two years) from the grant of EC	<b>Not complied yet.</b> The work for Amrapali CHP & Silo has been awarded to M/s Larsen and Turbo Limited on 31.12.2020. The project is under construction phase and shall be completed in the stipulated timeline as informed.
xvi	PP should install 10 nos of fog cannon system in mine area & OB dump.	Proposal initiated from CCL HQ for procurement of 10 no of Fog cannon is under Approval stage.



xvii	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 20.16 MTPA (Peak).	<b>Being Complied</b> Permission has been obtained.
xviii	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles	<b>Agreed.</b>
xix	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the milling area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.	<b>Agreed.</b>
xx	Commitment made during public consultation process shall be adhere to. The proposed amount earmarked for CER activities shall be considered as part of Environment Management Plan, which shall be accomplished within period of 5 years"	<b>Agreed.</b>
xxi	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.	<b>Complied</b> 1. Earlier when blasting was done within danger zone of 300 meters blasting permission was obtained vide No S-29020/02/2016-RR/434; dated 24.02.2017
xxii	In addition, the project proponent shall develop greenbelt outside the plant premises such as	<b>Assessed &amp; comply</b>



	avenue plantation, plantation in vacant areas, social forestry etc.	
xxiii	PP shall pay to farmers of agricultural land if there is any loss found by concerned District Commissioner as per extent rules or norms.	Agreed
xxiv	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	Being complied

**Standard EC Conditions**

SN	Specific Condition	Compliance
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**(a) Statutory Compliance**

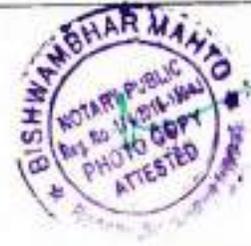
i	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project	Complied
ii	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	This condition is not applicable for Amrapali OCP.
iii	The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report [In case of the presence of schedule-I species in the study area].	Being Complied
iv	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.	Complied
v	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	Being Complied
vi	Solid/hazardous waste generated in the mines need to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.	Being complied

**(b) Air quality monitoring and preservation**

i	Continuous ambient air quality monitoring stations as prescribed in the statue to be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx.  Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.  Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least	Being Complied
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	once in six months.	
ii	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.	Being Complied
iii	Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM25) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.	Being Complied
iv	The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.	Being Complied
v	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining PUC certificate from the authorized pollution testing centres.	Being Complied
vi	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	Assured to comply
vii	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.	Assured to comply
<b>(c) Water quality monitoring and preservation</b>		
(i)	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.	Complied
(ii)	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	Being Complied
(iii)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall	Being Complied



	be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.	
(iv)	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	Being Complied
(v)	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	Complied.
(vi)	Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies	Complied.
(vii)	Adequate groundwater recharge measures shall be taken up for augmentation of groundwater. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).	Complied.
(viii)	Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.	CHP is not installed till date.
(ix)	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.	Being complied
(x)	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/ pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural watercourses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.	Being complied



(xi)	The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coalmine up to a distance of 5 km. A riverine /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.	Being complied
<b>(d) Noise and Vibration monitoring and prevention</b>		
(i)	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipment (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.	Being complied
(ii)	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, Fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.	Being complied
(iii)	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.	Complied
<b>(e) Mining Plan</b>		
(i)	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there under as applicable.	Being complied.
(ii)	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS)	Being Complied.
(iii)	No mining shall be carried out in forest land without obtaining forestry clearance as per Forest (Conservation) Act, 1980.	Being Complied.
(iv)	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	Being Complied.
<b>(f) Land Reclamation</b>		
(i)	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFC) from time to time shall be submitted to MOEFCC/Regional Office (RO).	Complied.
(ii)	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive topsoil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.	Assured to comply.
(iii)	The entire excavated area, backfilling, external OS dumping,	Assured to comply.



	(Including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land- use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.	
(iv)	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines.	Assured to comply
(v)	Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The topsoil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Chang/ Regional Office.	Being complied
(vi)	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	Complied
<b>(g) Green Belt</b>		
(i)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	Being Complied
(ii)	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. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.	Being complied
<b>(h) Public hearing and Human health issues</b>		
(i)	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.	Being Complied
(ii)	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified	Being Complied



	from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.	
(iii)	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	Being Complied
(iv)	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.	Complied
(v)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Being Complied
<b>(i) Corporate Environment Responsibility</b>		
(i)	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1 <sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.	Complied
(ii)	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/ conditions and/or shareholders/stake holders.	Complied
(iii)	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Complied
(iv)	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	Complied
(v)	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Assured to comply
<b>(j) Miscellaneous</b>		
(i)	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's	Complied



	website permanently.	
(ii)	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied
(iii)	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half yearly basis.	Complied
(iv)	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Being Complied
(v)	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied
(vi)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.2-11013/5712014-IA.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Being Complied
(vii)	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied
(viii)	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.	Complied
(ix)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Being Complied
(x)	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Being Complied
(xi)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.	Agree to Comply
(xii)	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agree to Comply
(xiii)	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agree to Comply
(xiv)	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agree to Comply
(xv)	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information / monitoring reports.	Agree to Comply



xvi	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Agree to Comply.
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*R*  
15/12/2021  
(R. N. Anjaan)  
A.S.O.

*A*  
15/12/2021  
(A. K. Yadav)  
R.O.





क्षेत्रीय कार्यालय सह प्रयोगशाला,  
झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद,  
पी०टी०सी० चौक, मटवारी रोड, हजारीबाग।

ANNEXURE - E

880

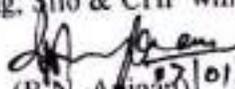
Ref.no.....

Dated.....

Inspection report of M/s Amrapali OCP, PS. - Tandwa, Distt. - Chatra. In the light of Hon.ble NGT vide  
OA no. 28 / 2020 / EZ.

Observation regarding non-compliance.	Present Status
1) Non-construction of Coal Handling Plant (CHP), Silo & Railway Siding.	Unit has given the work order to M/s Larsen & Turbo Ltd. for construction of Silo & Coal Handling Plant and for construction of Railway Siding to M/s RITES Ltd. work is under progress
2) Non-construction of Toe wall, catch drain and settling pit around OB dump.	Toe wall, Garland drain and settling pit has been constructed around the OB dump.
3) Insufficient tree plantation and green belt.	Total 89234 saplings has been planted in different location in Amrapali Project during the period from 2015 to 2021.
4) Contaminated run-off flowing into Barki River / Dudhmatia Nalla.	Toe wall, Garland drain and settling pit has been constructed around the OB dump.
5) Spontaneous combustion in coal dump.	Fire fighting arrangement as well as speedy disposal of coal sent to the party.
6) In adequate water sprinklers for controlling fugitive emission.	Water spraying on haul road and on the rout of Railway siding is being done by the movable Tankers and 40 nos. fixed water sprinklers. Water is taken from rainwater harvesting pond constructed within the lease hold area. Unit has obtained the permission for withdrawing ground water 4220 m <sup>3</sup> /d for Sprinkling and other purposes. Unit has 5 Tankers of 28 KL, 03 Tankers 12 KL, 10 Tankers 20 KL, 03 Tankers 12 KL, 03 Tankers 8 KL, 01 Tankers 18 KL, 01 Tankers 15 KL

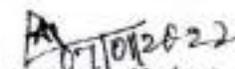
In the light of the above facts necessary action may be taken from HO level for not constructing Railway Siding, Silo & CHP which is given in EC conditions.

  
(R.N. Anjan) 07/01/2022  
A.S.O.

  
(Ashok Kumar Yadav)  
R.O.  
date - 7/1/22.

Mem. No. 10

Copy to The Member Secretary, Jharkhand State Pollution Control Board, Ranchi for informations necessary action.

  
(Ashok Kumar Yadav)  
R.O.



M/s Amrapali OCP, Magadh Amrapali, Aruaa, C.C.L. At +PO- Tandwa, Dist-Chatra.

881

क्षेत्रीय कार्यालय सह प्रयोगशाला  
झारखण्ड राज्य प्रदूषण नियंत्रण पर्षद  
पी०टी०सी०चौक,हजारीबाग ।  
Regional Office cum Laboratory,  
Jharkhand State Pollution Control Board  
P.T.C.Chowk, Hazaribagh. - 825301

Ref. No. 134

Date 24/2/22

**INSPECTION REPORT - Air & Water**

Date of Inspection: 24.02.2022

**(A) GENERAL INFORMATION**

1. Name & Address of Industry : M/s Amrapali OCP, Magadh Amrapali  
Aruaa, C.C.L.  
At +PO- Tandwa, Dist-Chatra.
- (i) New/Existing/Expansion/Modernisation : Existing  
(ii) Date of Commissioning : 7 th Feb. 2014  
(iii) Large/Medium/Small : Large  
(iv) Red/Orange/Green : Red.
2. Name, Designation & Full Address with Tel. No. of:
- (i) Occupier : Sri Satendra Kr. Gomasta, Director  
Technical operation CCL  
Darbhanga House, Ranchi
- (ii) Overall Incharge Of Industry : Mr P. N. Yadav, Project Officer
3. Name & designation of Person(s)  
Present during Inspection : Mr. Omprakash Ranjan, Dy. Manager (Env.)
4. Operational status : Full/ Partial/Closed  
(i) If partial, which part is closed : Full
5. Production capacity per day/month in tonne : Coal - 20.16 Million Ton/Yr
- (i) Name of product with their actual production per day/month:  
Raw Coal - 14.4 Million Ton/Yr  
(Unexpanded Production)
- (ii) Name of the raw material with their actual  
consumption per day / month in tonne : Explosive - 578810 Kg/Y
6. Manufacturing Process : Drilling, Blasting, Mining, Surface Minor then  
Dispatch.

**(B) WATER POLLUTION CONTROL**

## 1. Source of effluent generation

(i) Industrial	Source	Quantity/KLD
(a)	Mine pit	1315 KLD
(ii) Domestic	(a) Workers activity	1.0 KLD
	(b) Colony & Office	No colony

## 2. Treatment facility

- (i) Industrial : Mine water go to the mind out pit from where it is used for water sprinkling.  
(ii) Domestic : Septic tank provided for sewage discharge.

Note :- Unit obtained EC vide Ref. no. J - 11015 / 109 / 2003-1A(M) Date 20.03.2020 for enhancing production capacity from 12 MTPA to 14.4 MTPA for which unit has granted CTE (expansion) I/R against CTO application has been sent vide Ref. no. 473 dtd 21.03.2020.



882

Operational status of E.T.P.; Full/Partial/Closed (?)

(i) Industrial :

(a) If partial, which part is non-functional : ..... N.A.

(ii) Domestic :

(b) If partial, which part is non-functional : ..... N.A.

4. Number of outlet :

(i) Industrial : Nos **One**

(a) Origin of each outlet : **Mine pit**

(ii) Domestic : No **Nil**

(a) Origin of each outlet : **No Colony**

5. Disposal :

(i) Industrial :

(a) Mode : **Through pipe**

(b) Site : **Water sprinkling by water tanker at dusty area.**

(ii) Domestic :

(a) Mode : **Kuchcha Nallah**

(b) Site : **Effluent used for dusty area & green belt development.**

6. Sampling :

(i) Industrial **Done by CMPDIL (Mine Water)**

(a) Indicate outlet as under Sl. No. -4 .....

(b) Comparative flow condition with reference to Sl. No. B. 1 (i)

Excessive / Normal / Negligible .....

(ii) Domestic : **Not Done**

(a) Indicate outlet as under Sl. No. -4 .....

(b) Comparative flow condition with reference to Sl. No. B. 1 (i)

Excessive / Normal / Negligible .....

7. Compliance of condition /directions :

(i) Whether applied for consent (for period from **01.01.2022** to **31.12.2025**.) Yes / No

If Yes : Pending with H. Q./ to be forwarded by R.O. .... Yes / No

(ii) Discharge Consent **Applied for CTO vide H.O. Memo no. - JSPCB/HO/RNC/CTO-10829845/2021/1692 dtd - 31.12.2021 valid upto 31.12.2022.**

(A) **Specific Conditions:**

1. That, the occupier shall reclaim mined out areas with OB and shall plant trees on them.

**Compliance**

\*Internal dumping/ Technical reclamation to the mined out area of Amrapali OCP has been done from 2017-18 to 2019-20. In 2017-18, 26 Ha area was technically reclaimed, in 2018-19, 5.30 Ha of area was technically reclaimed, in 2019-20, 34.7 Ha and in 2020-21 35 Ha of area has been backfilled. 52 Ha. in 2021 - 22.

\*From beginning to the monsoon 2021, total approx 90,000 trees have been planted and being maintain.

\*In Monsoon 2020, spread the Seed balls for raising of green belt in Binglat OB dump and for top soil preservation at Horhe OB dump. Work is completed at Binglat OB dump area.



883

That the occupier shall construct catch drain siltation pond retaining wall of appropriate size to arrest silt & sediment flows from OB dump and mineral dump

3. That the occupier shall do Over Burden management properly as prescribed in environment clearance.
4. That the occupier shall operate crushers at CHP with high efficiency bag filters water sprinkling system to check fugitive emission
5. That, the occupier shall operate and maintain ETP with workshop of heavy vehicles.
6. That, the occupier shall inform to Regional Office – Cum –Lab, Hazaribagh and Head Office JSPCB Board at Ranchi within 24 hrs from the time of Closure or opening of the plant.
7. That, the occupier shall if be found violating the Consent to Operate at any point of time during inspection of the plant by the competent authority, the consent to operate shall be revoked as per provision of the acts.
8. That the occupier shall not exceed the production capacity beyond the capacity as mentioned in CTO.
9. That, this CTO is subject to any further ecision/ direction/order/ issued by MoEF&CC in this regard.
10. That the occupier shall ensure the transportation of the ROM & OB through fully mechanically covered transport vehicles and in case of contractual transportation an agreement shall be made with the transporters mentioning contract of transport of

3/17

**Complied.**

**Toe Wall**

- a. In the OB dump at Binglat, toe wall has been constructed 1 km length at the North-west side of the OB dump.
- b. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.
- c. Construction of quarry boulder retaining wall at Honhe OB dump is completed with garland drain for 2 Km of length.

**Catch drain**

- a. Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump. Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed. OB DUMP has been stacked at earmarked dumpsite with proper terracing and maintenance of slope as per statutory provisions.

Not Complied

Work awarded to M/s Larsen and Turbo Limited on 31.12.2020. The team of M/s Larsen & Turbo visited the site with Project Engineer E&M for survey as informed by the unit's representative.

Being complied

Agreed

Agreed

Agreed

Complied.

Agreed and complied.



materials shall be terminated with immediate effect if any vehicle at point of time during the transportation of materials be found uncovered.

11. That the occupier shall construct and maintain catch drain siltation pond retaining wall of appropriate size to arrest silt & sediment flows from soil, OB dump and mineral dump.
12. That the occupier shall operate crushes at CHP with high efficiency bag filters water sprinkling system to check fugitive emission.
13. That the occupier shall comply all the conditions of EC and CTO and submit its report to the board on six monthly along with the recent analysis reports.
14. That the occupier shall install, operate & maintain ETP with workshop of heavy vehicles.
15. That the occupier shall construct toe wall and garland drain around the OB dump.

**Catch drain**

\*Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump.  
\*Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.

**Toe Wall**

- a. At Binglat OB dump, toe wall has been constructed 1 km length at the North-west side of the OB dump.
- b. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.  
Construction of quarry boulder retaining wall at Honhe Ob dump is completed with garland drain for 2 Km of length.  
Work awarded to M/s Larsen and Turbo Limited on 31.12.2020. The team of M/s Larsen & Turbo visited the site with Project Engineer E&M for survey.  
Agreed and complying.

Oil & grease trap have been made in the workshop area of outsourcing company. An another ETP is proposed in the workshop. Work awarded to NBCC for Construction of Workshop along with ETP for the expansion project vide No.NBCC/ED(CPG)/2020/500 Dated:13.11.2020.

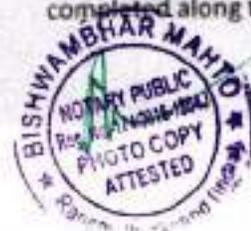
**Complied.**

**Toe Wall**

- a. In the OB dump at Binglat, toe wall has been constructed 1 km length at the North-west side of the OB dump.
- b. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.
- c. Construction of quarry boulder retaining wall at Honhe OB dump is completed with garland drain for 2 Km of length.

**Catch drain**

- a. Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at



985

16. That, the occupier shall install, operate and maintain the system for online monitoring of ambient air quality and continuous mine water discharge quality with connectivity to Jharkhand State Pollution Control Board and CPCB server.
17. That the occupier shall install, operate and maintain facilities to dispose of carbonaceous hazardous and non-hazardous solid wastes for co-processing in high temperature kilns/furnaces and shall dispose of non-carbonaceous hazardous wastes to TSDF and shall use non-carbonaceous non-hazardous solid wastes or mine overburden as a substitute of live soil or as a land fill as and where applicable.
18. That the occupier shall make arrangement of transportation of ROM to the railway siding or coal washery by pneumatic conveyer fully covered all along its way.
19. That the occupier shall/keep OB dump (s) to grey land and at least 100mtr away from river/stream/water body.
20. That the occupier shall construct toe wall and garland drain around OB dump(s) with pucca sumps having pumping back arrangement of settled run off to prevent carryover of soil and dirt with runoff into nearby water body/system.

Northwest side of Binglat OB Dump. Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is complete  
PM 10 Analyzer & CAAQMS have been installed.

The waste generated during mining is OB and is stacked in OB dumps earmarked for the purpose.

Assured to comply

**Being Complied**

Distance of more than 100 meter is being maintained from Barki River & nallah.

**Complied.**

**Toe Wall**

- a. In the OB dump at Binglat, toe wall has been constructed 1km length at the North-west side of the OB dump.
- b. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.
- c. Construction of quarry boulder retaining wall at Honhe OB dump is completed with garland drain for 2 Km of length.

**Catch drain**

- a. Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump. Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.



- 21. That the occupier shall make separate arrangement for proper storage of live soil obtained during area with mine OB. Complied  
The top soil (2.6 L m3) has been preserved near Honhe OB dump. It shall be laid as per top soil management plan when the OB dump will reach its designed height. Top soil is being spread over 23 Ha reclaimed/ backfilled area for Monsoon plantation 2021. removal of OB from the mine and reclaim decoaled
- 22. That the occupier shall establish well equipped environment laboratory with facilities to monitor at least all regulatory parameters. Coal India have own lab. Named M/s CMPDIL for the monitoring work.
- 23. That the occupier shall ensure washing of wheels of the vehicles used for transportation of coal to mitigate fugitive emission. Agreed
- 24. That the occupier shall ensure installation and start operationalization of CAAQMS and PM 10 analyzer within 2 months from date of issuance of this CTO failing which CTO may be revoked and environmental compensation may be levied as per the norms. PM10 analyzer & CAAQMS system have been installed and connected to CPCB & JSPCB server.
- 25. That the occupier shall submit application for renewal of consent under section 25/26 of the water (prevention&Controlof Pollution)Act, 1974 and under section 21 of the Air (prevention &Control of pollution) Act,1981 again 120 days prior to the date of expiry of this consent with requisite fee and documents showing compliance of all of the above condition. Agreed
- 26. That this CTO supersedes the CTO granted vide Ref.No JSPCB/HO/RNC/CTO-6645615/2020/1408,Dated 01.09. 2020. Agreed

**(B) General Condition.**

- (1) That, the occupier shall maintain the ambient air quality within the standard given below :
  - (2) That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:
- | S N | Parameter          | Standard               |
|-----|--------------------|------------------------|
| 1   | Particulate Matter | 150 mg/Nm <sup>3</sup> |
- (3) That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:
- | S N | Parameter              | Standard |
|-----|------------------------|----------|
| 1   | Total Suspended Solids | 100 mg/L |
| 2   | BOD                    | 30 mg/L  |

**Compliance**  
Coal India have own lab. Named M/s CMPDIL for the monitoring work. Standards are maintained and test report attached for the quarter ending September 2021 & December 2021 as Annexure I. Maintained. Time to time monitoring has been done by CMPDIL Ranchi

Maintained, Regular monitoring has been done by CMPDIL. Test report attached as Annexure I.



859

	COD	250 mg/L	
4	Oil & Grease	10 mg/L	
(4)	That, the occupier shall dispose of solid wastes as follows:		The waste generated during mining is OB and is stacked in OB dumps earmarked for the purpose
S N	Waste Type	Mode of Disposal	
1	Hazardous Carbonaceous Wastes	In co-processing in high temperature furnaces or kilns	
2	Hazardous Non-Carbonaceous Wastes	In TSDF	
3	Non-Carbonaceous Non-Hazardous solid wastes/ Mine Over Burden	As a substitute of Soil or Mineral	
(5)	That, the occupier shall keep D G Set(s) within acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.		Complied
(6)	That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge and submit the photographic view of the structures within a month.		<b>Rainwater Harvesting:-</b> i) Work Completed for installation & Construction of rainwater harvesting system at PO office and Executive Hostel of Amrapali Project and as well as other 15 no. of Rain water Harvesting system completed. Check Dams 5 nos. and 3 nos. pond have been constructed.
(7)	That, the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.		*From beginning to the monsoon 2021, approx 90,000 trees have been planted and being maintain *In Monsoon 2020, spread the Seed balls for raising of Green belt in Binglat OB dump and for top soil preservation at Hgnhe OB dump. Work is completed at Binglat OB dump area.
(8)	That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year latest by 30th September of the next financial year.		Complied. Environmental Statement for 2020 has been submitted to Board.
(9)	That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph 3 of this CTO yearly at required periodicity.		Monitoring is done by CMPDI which is an NABL accredited laboratory. The report for the quarter ending September 2021 and December '21 is attached as Annexure- I.
(10)	That, this CTO is valid subjected to the validity of mining Lease/Mining Plan/Ecofriendly/Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.		Agreed
(11)	That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force, rests with the industry/ unit/ occupier.		Agreed
(12)	That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding, if any, instituted in the past or that could be, instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.		Agreed



888

That, the occupier shall comply with all applicable provisions of *Agreed* the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules made there under.

**(C) AIR POLLUTION CONTROL**

1. Source of Emission : Boiler/Furnace/Crushing Section/process/specify,if any other.....  
*Drilling, Blasting, Mining and movement of heavy vehicles.*

2. Pollution Control facility :

- (i) *Water Sprinkling by tanker on road and dusty area.*
- (ii) *Tree Plantation*
- (iii) *Surface minor is used for coal mining for coal mining to minimize the air pollution.*

3. Operational Status of pollution control facility : Full/partial/non-functional If partial, which part is non-functional.

4. Fuel :

(i)	Type <i>H.S.D.</i>	Quantity (t/day) <i>18000 Lts/day</i>
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5. Stacks : *No Stack*

Number	Attached to	Height	Port hole (Y/N)	Platform (Y/N)	Ladder (Y/N)
--------	-------------	--------	--------------------	-------------------	-----------------

(i) .....  
.....

6. Date of last Air Monitoring : *Monitored by CMPDIL*

Stack emission	A.A.Q.	Noise
----------------	--------	-------

(i) .....  
.....

7. If D.G.Set :

Capacity (in KVA)	Housing proper improper	Height of exhaust pipe from roof in meter (m)
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(i) *5 nos D.G set* *Proper* *Acoustic enclosure*

8. Compliance of condition /directions :

(i) Whether applied for consent (for period from *01.02.22* to *31.01.25*) Yes / No  
If Yes : Pending with H. Q./ to be forwarded by R.O. .... Yes / No

(ii) Emission Consent : *Applied 1st time after obtaining CTE (Expansion)*  
Condition(s) Compliance

9. Compliance of N.O.C. conditions/directions (Vide letter no *JSPCB/HO/RNC/CTE-10408925/2022/65 dtd 15.02.2022*) for Emission

**(A) Specific Conditions**

1. That, the occupier shall install CAAQMS and PM 10 analyzer within 2 months from the date of issuance of this CTE otherwise, CTO will not be considered and environmental compensation will be levied as per Act.
2. That, the occupier shall install, operate and maintain the systems for online monitoring of ambient air quality and continuous mine water discharge quality with connectivity to Jharkhand State Pollution Control Board and CPCB server.
3. That, the occupier shall install, operate and maintain facilities to dispose of carbonaceous hazardous and non-hazardous solid wastes for co-processing in high temperature kilns/ furnaces and shall dispose of noncarbonaceous hazardous wastes to TSDF and shall use non-carbonaceous non-hazardous solid wastes or mine overburden as a substitute of live soil or as a land fill as and where applicable.

*Compliance  
CAAQMS & PM10 analyzer  
have been installed insralled  
and connected to CPCB &  
JSPCB server.  
CAAQMS & PM10 analyzer  
have been installed insralled  
and connected to CPCB &  
JSPCB server.  
Complied*



That, the occupier shall make arrangement of transportation of ROM to the railway siding or coal washery by pneumatic conveyer fully covered all along its way.

Transportation of coal through covered dumpers / trucks is being carried in the Shivpur railway siding area.

The condition shall be complied when construction of crusher and in-pit belt conveyors will be completed.

Work awarded to M/s Larsen and Turbo Limited on 31.12.2020. Work is in progress.

Agreed

Vehicles used for transporting the minerals are covered with Tarpaulin and optimally loaded.

5. That, the occupier shall ensure the transportation of the ROM & OB through fully mechanically covered transport vehicles and in case of contractual transportation an agreement shall be made with the transporters mentioning contract of transport of materials shall be terminated with immediate effect if any vehicle at any point of time during the transportation of materials be found uncovered.
6. That, the occupier shall shift/keep OB dump(s) to grey land and at least 100 mtr away from river / stream/water body.
7. That, the occupier shall construct toe wall and garland drain around OB dump(s) with pucca sumps having pumping back arrangement of settled run off to prevent carryover of soil and dirt with runoff into nearby water body/ stream.

#### **Being Complied**

Distance of more than 100 meter is being maintained from Barki River.

#### **Toe Wall**

In the OB dump at Binglat, toe wall has been constructed 1 km length at the North-west side of the OB dump

a. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.

b. Construction of quarry boulder retaining wall at Honhe OB dump is completed with garland drain for 2 Km of length.

d. Work completed for making of quarry boulder retaining wall between Top Soil & OB dump along with catch drain & Siltation pond on Top soil under Amrapali Project, A-C Area.

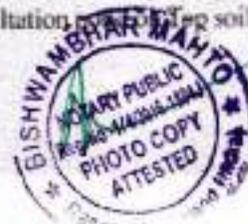
#### **Catch drain**

a. Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump.

b. Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.

c. Work completed for making of catch drain and siltation pond at different coal stock.

d. Work completed for making of quarry boulder retaining wall between Top Soil & OB dump along with catch drain & Siltation pond on Top soil.



That, the occupier shall make separate arrangement for proper storage of live soil obtained during removal of OB from the mine and reclaim decoaled area with mine OB.

Complied

The top soil (2.6 l. m3) has been preserved near Honhe OB dump. It shall be laid as per top soil management plan when the OB dump will reach its designed height as informed by the units representative.

Top soil spread over 23 Ha reclaimed/ backfilled area for Monsoon plantation 2021 and plantation work for 57500 saplings completed.

4 Ha of backfilled area has been handed over to State Forest department for Sal Plantation in Monsoon 2022.

9. That, the occupier shall construct and maintain catch drain, siltation pond retaining wall of appropriate size to arrest silt & sediment flows from soil, OB dump and mineral dump

**Toe Wall**

a. In the OB dump at Binglat, toe wall has been constructed 1 km length at the North-west side of the OB dump.

b. Construction of extended 450m length of Toe wall at first bench of Binglat OB Dump is completed.

c. Construction of quarry boulder retaining wall at Honhe OB dump is completed with garland drain for 2 Km of length.

d. Work awarded and completed for making of quarry boulder retaining wall between Top Soil & OB dump along with catch drain & Siltation pond on Top soil under Amrapali Project, M-A Area.

**Catch drain**

a. Construction of Catch drain of 3 Km length & 01 nos of Siltation Pond are completed along the Toe wall at Northwest side of Binglat OB Dump.

b. Construction of Catch drain of 2 Km length & 02 nos of Siltation pond around Honhe OB Dump is completed.

c. Work completed for making of catch drain and siltation pond at different coal stock.

d. Work completed for making of quarry boulder retaining wall between Top Soil & OB dump along with catch drain & Siltation pond on Top soil.

10. That, the occupier shall establish well equipped environmental laboratory with facilities to monitor at least all regulatory parameters.

Ambient Air Quality monitoring as well as noise level monitoring report prepared by CMPDI for the Qtr ending September 2021 & December 2021 are attached as

**Annexure-1**



82

That, the occupier shall operate crushers at CHP with high efficiency bag filters, water sprinkling system to check fugitive emission.

Work awarded to M/s Larsen and Turbo Limited on 31.12.2020. The team of M/s Larsen & Turbo visited the site with Project Engineer E&M for survey. Award of work no:-GM (E&M)/CHP/20/2826-37 dated:- 31-12-2020.

The land for Coal Handling Plant (CHP) consists of Forest land. Online proposal for diversion of 431.59 Ha of forest land has been registered and hard copies of application along with DGPS and KML submitted to DFO, Chatra South.

12. That, this CTE is valid subject to compliance of EC conditions.

**Complied**

Valid Environmental Clearance vide ref no:- J-11015/109/2003-IA. (M) dated 10.05.2021. Six monthly compliance report for EC submitted to Board timely. Latest by ref no:- PO/Amrapali/EC compliance / 2021-22/2176 on 11/12/2021.

13. That, the occupier shall comply all the conditions of EC and CTE and submit its report to the Board on six monthly basis to the concerned organizations.

**Complied**

Six monthly compliance report for EC, CTE & CTO submitted to Board timely. Latest by Latest by ref no:- PO/Amrapali/EC compliance /2021-22/2176 &2174 on 11/12/2021.

14. That, the occupier shall apply for CTO after complying all the conditions of EC and CTE alongwith the compliance report and photographs in support of the compliance.

**Agreed.**

Compliance report for EC, CTE & CTO submitted to Board. EC (20.16 MTPA) vide Letter No J-11015/109/2003-IA (M) Dated 10.05.2021 and CTE issued vide Letter No.- JSPCB/HO/RNC/CTE-10408025/2022/65 Dated 15.02.2022.

15. That, the occupier shall not exceed the production capacity beyond the capacity as mentioned in CTE.

**Complied**

Project Proponent will not exceed the production capacity beyond the capacity as mentioned in CTE.

16. That, this CTE is subject to any further decision/direction/ order issued by MoEF in this regard.

**Agree to Comply**

Any further decision/direction/order issued by MoEF in this regard will be followed.

17. That, the occupier shall reclaim mined out areas with OB and shall plant trees on them.

**Assured to comply.**

The final mine void depth shall be as per the approved mining plan. The remaining area shall be backfilled and bio-reclaimed as per the approved mine closure plan. Internal dumping/ Technical reclamation to the mined out area of Amrapali OCP has been done from 2018 to 2021-22 till January



2022.

In 2017-18, 26 Ha area was technically reclaimed, in 2018-19, 5.30 Ha of area was technically reclaimed, in 2019-20, 34.7 Ha in 2020-21 & 52 Ha of area has been backfilled in 2021-22 upto January 2022. Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021.

In Monsoon 2021, Plantation work in 23 Ha Backfilled area of 57500 plants completed by State Forest Department. About 4000 saplings of multi species planted/distributed during Vriksharopan abhiyan 2021 for development of Green Belt in and around the mine site.

Approx 2600 species of drought hardy nature have been planted in 2020 at Binglat O/B dump.

Around 25134 plants have been planted for raising of Green Belt / Block plantation.

4 Ha of backfilled area has been handed over to State Forest department for Sai Plantation in Monsoon 2022.

18. That, the occupier shall install, operate & maintain ETP with workshop of heavy vehicles before applying for CTO.

Automated wheel Washing system with Effluent Treatment Plant has been commissioned & operational at the workshop of Outsourcing agency to mitigate fugitive emission.

Provision of ETP has been made in the workshop. Work awarded to NBCC for Construction of Workshop along with ETP for the expansion project vide No.NBCC/ED(CPG)/2020/500 Dated:13.11.2020.

19. That, the occupier shall ensure washing of tyres of vehicles used for transportation of coal and also ensure proper covering of the same to avoid any dust emission.

Automated wheel Washing system with Effluent Treatment Plant has been commissioned & operational at the workshop of Outsourcing agency to mitigate fugitive emission.

20. That, the occupier shall submit environmental compensation before application of CTO. If environmental compensation will not be submitted then CTE may be revoked.

Complied. Payment towards Environmental Compensation of Rs. 1,35,00,000 has been submitted through D.D No.960479 on 24.02.2022 at JSPCB office..

21. That, this CTE will be valid subject to any further direction made by MoEF and CC in the reference to the letters communicated.

Agreed



M/s Amrapali OCP, Magadh Amrapali, Aroea, C.C.L. At +PO- Tandwa , Dist-Chatra.

- That, after obtaining CTO, PP shall not exceed the production capacity as mentioned in this CTE. Agreed
- 23. That, the occupier shall float tendering and other processes for the capacity for which CTE and EC has been granted. Agreed
- 24. That, this CTE is being issued completely on the basis of the issuance of Environmental Clearance issued by MoEF and CC. Agreed

(B) General Conditions :

(1) That, the occupier shall construct pucca (i) minimum ten feet high boundary wall and (ii) approach road and internal roads and shall keep the premises neat and clean and tidy.

Pucca road has been constructed as follows:-

- 1 NBCC road from Binglat Check Post to Honhe Office-4 Km.
- 2 Weigh Bridge no. 4 to 1 no. culvert-370 metres.
- 3 Weigh Bridge no.8 to Weigh Bridge no. 9-380 metres.
- 4 Weigh Bridge no.6 to Weigh Bridge no. 12-450 metres.
- 5 Checkpost No:- 6 to Shivpur siding existing road will be constructed by State Govt. through RCD on the deposit basis by Amrapali Project for 3.5 Km.

Coal stock no:- 6 to Culvert no:-1 work is in award stage for 2.5 km length road.

(2) That, the occupier shall install comprehensive enclosure (s) to cover the places of unloading of raw materials, the equipments of their processing & transferring, the places of loading of products, by products and wastes for prevention of fugitive emission and shall install such automatic inbuilt system(s) that in house dust/ gases collect(s) and undergo (es) cleaning and clean air goes out.

At present the following mitigation measures are being undertaken for control of dust & other fugitive emissions:

- a. The work for fixed water sprinkling system over a length of 01 Km at haul road is under award stage.
- b. Fixed sprinkling system on Coal transportation road at Honhe Village is under tendering process.
- c. Deployment of Road Sweeping Machines on CT Road is at HQ for procurement.
- d. 8 number of Fog cannon under Procurement at HQ and tender floated for the 5 numbers of Static Fog Cannon.
- e. Work awarded and is in progress for Wind Screen Barrier 1 Km at Ursa Village & for 2 Km both side at Honhe Village.
- f. Work awarded for prevention of Dudhmatiya stream using Jute netting, Guard wall with drains (along stream length 1500 m).
- g. 05 number of departmental water sprinklers of 28 KL capacity having an average working hours of 4 Hr/day are deployed for water sprinkling. In addition, there are 13 contractual water sprinklers of 12 KL & 20 KL capacities are deployed with an average working hours of 4 Hr/day.

Monitoring of air parameters is being undertaken fortnightly.



*M/s Amrapali OCP, Magadh Amrapali, Araca, C.C.L. At -PO- Tandwa, Dist-Chatra.*

- (3) That, the occupier shall install such automatic inbuilt system(s) that process flue gas(es) / process gas(es) and undergo(es) cleaning and clean air go(es) out through the chimney(s), having height(s) as per Central Pollution Control Board norm. Not applicable.  
Will be complied whenever required.
- (4) That, the occupier shall have D G Set(s) of the standard as laid in the Environment (protection) Rules, 1986 and shall install it (them) within acoustic enclosure (s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm. All DG sets are enclosed in specified designed acoustic enclosure.
- (5) That, the occupier shall impart treatment as per Central Pollution Control Board text to wastewater and shall keep process effluent in close-circuit and effluent from other sources in conformity with the standard (s). Agree to comply  
This mine is a Greenfield project which started coal production from February 2014.
- (6) That, the occupier shall install Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge. **Rainwater Harvesting:-**  
a. Work Completed for installation & Construction of rainwater harvesting system at PO office and Executive Hostel of Amrapali Project  
b. Work completed for installation of Rainwater Harvesting system at all 15 locations such as VTC, PIT Canteen, Rest Shelter, First Aid Centre, IRB Camp Prefab Hostel, Unit Store under Amrapali Project, A-C Area.  
Ponds, catch drain & Check dams have been constructed for maintaining the whole soundness of water.
- (7) That, the occupier shall create new water body (ies) / remove deposit(s) of existing water body(ies) and nearby stream(s) and pond(s) and shall maintain the wholesomeness of water. **Ponds-**  
1. 01 no of Pond is under process at Honhe.  
2. 01 no of pond has been constructed at Birhortola (Koyed).  
3. Construction of 1 No of pond at Ursu more is completed.
- (8) That, the occupier shall grow greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity. Total 89234 saplings have been planted in different location in Amrapali Project from 2015 to 2021.
- (9) That, this CTE is valid subjected to the validity of mining Lease / Mining Plan / Ecofriendly / Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically. Agreed. The mine have the valid Mining plan & Environmental Clearance (20.16 MTPA) vide ref no:-J-11015/109/2003-IA.(M) dated 10.05.2021.
- (10) That, this CTE is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force, rests with the industry/ unit/ occupier. Agreed



**M/s Amrapali OCP, Magadh Amrapali, Araca, C.C.L. At +PO- Tandwa , Dist-Chatra.**

(1) That, this CTE shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under. Agreed

(12) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules there under. Agreed

**(D) SOLID WASTE MANAGEMENT** (Other than those covered under the hazardous waste (M&H) rules, 1989

1. Details of solid waste :

Source	Type	Quantity (t/day)	Quantity (t/day)
(i) Process <b>Mining</b>	<b>Over Burden</b>	<b>15.80 Million M<sup>3</sup>/Yr.</b>	<b>Nil</b>
(ii) Pollution control facilities			

2. Disposal :

(i) Quantity (t/day)	<b>Over Burden</b>	<b>15.80 Million M<sup>3</sup>/Yr.</b>
(ii) Site	<b>Dump in lease hold area.</b>	
(iii) Any other Mode	.....	

**(E) HAZARDOUS WASTE MANAGEMENT**

1. Details of hazardous waste:

Source	Type	Quantity (t/day)	Quantity (t/day)
(i) Process	<b>Waste Oil</b>	<b>50 Lts/month</b>	<b>Nil</b>
	<b>Discarded Batteries</b>	<b>1 Nos/M</b>	

(ii) Pollution Control facilities... **2 Nos /month**

2. Mode of treatment : .....

3. Storage : **Waste Oil - 50 L/M** t/day How **Kept in M.S. Drums.**  
**Discarded Batteries - 1 No/M**

4. Disposal :

(i) Quantity t/day **(i) 50 L/M** **(ii) 1 Nos /month**  
(ii) Site **Sent to original manufacture co.**

5. Whether authorisation obtained : Yes/No **Authorisation from June, 14 to June, 2019. 2 applied for renewal.**

6. Compliance of conditions / directions : .....

**(F) WATER CESS**

1. Source of water supply & quantity (in KLD)

Industrial Cooling Spraying in mine pits or boiler feed.	Domestic purpose	Processing whereby water gets polluted & the pollutants are easily biodegradable	Processing whereby water gets polluted & the pollutants are not easily biodegradable & are toxic
(i) Municipal water Supply Mains	<b>2 KLD</b>	.....	.....
(ii) Well/Tube-well	.....	.....	.....
(iii) Canal	.....	.....	.....
(iv) River	.....	.....	.....
(v) Any other <b>Mine</b>	<b>1315 KLD</b>	.....	.....



206

M/s Amrapali OCP, Magadh Amrapali, Araea, C.C.L. At +PO- Tandwa , Dist-Chatra.

2. Method of measurement : Water meter / Venturi meter / Notch / Orifice meter / any other **As informed**  
3. Operational status of measuring devices Functional / Non-functional

4. Last date of water cess paid

**(G) LAND AVAILABLE FOR GREEN BELT DEVELOPMENT**

- (i) Existing **Tree Plantation has been done**. Sq.m
- (ii) Available for future development ..... **Sufficient** ..... Sq.m

**(H) PUBLIC COMPLAINTS (if any) Yes**

- 1. Nature of complaint **Regarding air pollution due to transportation of trucks**
- 2. Number of residential units within 100 (mt....) the boundary of the unit :

**(I) COMMENTS OF :**

**Ashok Kumar Yadav R.O.**

(A) INSPECTING OFFICER : (Name **R. N. Anjan** Desig. **A.S.O.**

- (i) Recommendation for Consent : **Unit has installed the PM10 analyzer & CAAQMS but not installed CHP, Silo & Railway Siding. In the light of above facts show cause may be asked.**

*[Signature]*  
 24/02/2022  
**(R. N. Anjan)**  
**A.S.O.**

*[Signature]*  
 24/02/2022  
**(Ashok Kumar Yadav)**  
**R.O.**

2. Regional Officer's Recommendation:

- (i) Consent : **As above**

*[Signature]*  
 24/02/2022  
**(Ashok Kumar Yadav)**  
**R.O.**



Compliance Report of EC Vide Letter No J-11015/109/2003-IA. II (M) Dated 10.05.2021 in respect of M/s AMRAPALI OCP (20.16 MTPA) of Amrapali & Chandragupta Area, CCL in an area of 619.87 Ha.

SN	Specific Condition	Compliance
i	The project proponent shall obtain Consent to establish from the State Pollution Control Boards for the proposed peak capacity of 20.16 MTPA (Peak) prior to commencement of the increased production	Complied
ii	All the non-compliance conditions stipulated in earlier ECs shall be complied within 4 months.	Being Complied
iii	Further expansion shall be considered only after the completion of mitigation measures proposed by PP during EAC presentation based on recommendation of Ministry's Regional Office.	Agreed.
iv	All the 3 continuous air quality monitoring station should be made operation within 2 months from the date of issue of this letter and the real time data so generated to be uploaded on company website. In addition, data should also be displayed digitally at entry and exist gate of mine lease area for public display.	Complied
v	Adequate effectiveness of EMP should be analyzed from the offset/hike of air pollution data from continuous monitoring station and quarterly report shall be generated and submitted with 6 monthly compliance reports to RO, MoEF&CC.	Complied
vi	The PP shall complete all non-compliance/ partial compliance in one year and the action taken report shall be submitted to Regional Office of the MOEF&CC	Assured to comply
vii	Quality of polluted water generated from the operations which include COD and acid mine drainage and metal contamination shall be monitored along with TDS, DO, TSS. The monitored data shall be uploaded on the website of the company as well as displayed at the site in public domain.	Complied
viii	PP shall submit a third party assessment of EC Compliance shall be undertaken once in three years through agency like ICFRI/ NEERI/IIT or any other expert agency identified by the Ministry to Ministry's Regional Office.	Assured to comply As directed, a third party assessment shall be carried out for Amrapali OCP undertaken once in three years through experts agency recognized by MoEF&CC. Unit has moved the proposal to NEERI Nagpur as informed.
ix	Continuous Monitoring at Occupational safety and health hazards and the Corrective action	Complied



	need to be ensured.	
X	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	<b>Being complied</b> The training on livelihood and skill development is regularly been undertaken in CCL & Amrapali area for making nearby villagers more employable as informed.
Xi	PP to plant 100,000 nos. of Sal trees only and develop nursery of 5 ha sal trees for free distribution in nearby areas.	<b>Being Complied</b>
Xii	Mining shall be carried out only by surface miners for the project (as proposed) and silo loading till railway siding through in-pit conveyor should be installed to avoid road.	Partly installed. The work for Amrapali CHP & Silo has been awarded to M/s Larsen and Turbo Limited on 31.12.2020 & for Railway Siding work is awarded to M/s RITES in 2015..
Xiii	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.	<b>Agreed.</b> Continuous development of green belt, regressing & vegetation is being practiced every year in Monsoon departmentally and by State Forest department on backfilled area or available locations. Grass matting using Guinea grass, Charabadam and Johnson grass have been done on the barren portion of Honhe O/B dump in 2020.
Xiv	PP should opt specific mitigative measures for the straightening of Dudhmatia stream Regular monitoring of the flow rate of Dudhmatia stream shall be carried out and record maintain	<b>Assured to comply.</b> Work awarded for stabilization of Dudhmatia Nalla 1500 m jute netting.
Xv	PP should ensure that coal transportation from Amrapali Railway Siding through belt conveyor (within two years) from the grant of EC	Not complied yet. The work for Amrapali CHP & Silo has been awarded to M/s Larsen and Turbo Limited on 31.12.2020. The project is under construction phase and shall be completed in the stipulated timeline as informed.
xvi	PP should install 10 nos of fog cannon system in mine area & OB dump.	Proposal initiated from CCL HQ for procurement of 10 no of Fog cannon tender floated for 5 static



		fog canon.
xvii	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 20.16 MTPA (Peak).	<b>Complied</b> Permission has been obtained.
xviii	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles	<b>Being Complied</b>
xix	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgement dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the milling area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEFCC.	<b>Agreed.</b> Continuous development of green belt, regressing & vegetation is being practiced every year in Monsoon departmentally and by State Forest department on backfilled area or available locations. Grass matting using Guinea grass, Charabadam and Johnson grass have been done on the barren portion of Honhe O/B dump in 2020.
xx	Commitment made during public consultation process shall be adhere to. The proposed amount earmarked for CER activities shall be considered as part of Environment Management Plan, which shall be accomplished within period of 5 years"	<b>Being Complied</b>
xxi	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.	<b>Complied</b> 1. Earlier when blasting was done within danger zone of 300 meters blasting permission was obtained vide No S-29020/02/2016-RR/434; dated 24.02.2017
xxii	In addition, the project proponent shall develop	<b>Being Complied</b>



	greenbelt outside the plant premises such as avenue plantation, plantation in vacant areas, social forestry etc.	
xxiii	PP shall pay to farmers of agricultural land if there is any loss found by concerned District Commissioner as per extent rules or norms.	Agreed
xxiv	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	Being complied

**Standard EC Conditions**

SN	Specific Condition	Compliance
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**(a) Statutory Compliance**

i	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	Complied
ii	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	This condition is not applicable for Amrapali OCP.
iii	The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).	Being Complied
iv	The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.	Complied
v	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	Complied
vi	Solid/hazardous waste generated in the mines need to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.	complied

**(b) Air quality monitoring and preservation**

i	Continuous ambient air quality monitoring stations as prescribed in the statute to be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx.  Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.  Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of	Complied
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	heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.	
ii	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.	Complied
iii	Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM25) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.	Being Complied
iv	The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.	Being Complied
v	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining PUC certificate from the authorized pollution testing centres.	Complied
vi	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.	Assured to comply
vii	Coal handling plant shall be operated with effective control measures w.r.t various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.	Assured to comply
<b>(c) Water quality monitoring and preservation</b>		
(i)	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.	Complied
(ii)	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	Being Complied
(iii)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during	Being Complied



	the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.	
(iv)	Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.	Being Complied
(v)	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.	Complied.
(vi)	Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies	Complied.
(vii)	Adequate groundwater recharge measures shall be taken up for augmentation of groundwater. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).	Complied.
(viii)	Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.	CHP is not installed till date.
(ix)	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.	Being complied
(x)	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/ pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural watercourses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other	Being complied



	authority as prescribed by the law.	
(xi)	The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coalmine up to a distance of 5 km. A riverine /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.	Being complied
<b>(d) Noise and Vibration monitoring and prevention</b>		
(i)	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipment (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.	Being complied
(ii)	Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, Fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.	Being complied
(iii)	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.	Complied
<b>(e) Mining Plan</b>		
(i)	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there under as applicable	Being complied.
(ii)	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS)	Being Complied.
(iii)	No mining shall be carried out in forest land without obtaining forestry clearance as per Forest (Conservation) Act, 1980.	Being Complied.
(iv)	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	Being Complied.
<b>(f) Land Reclamation</b>		
(i)	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFC) from time to time shall be submitted to MOEFCC/Regional Office (RO).	Being Complied.
(ii)	The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive topsoil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.	Assured to comply.



(iii)	The entire excavated area, backfilling, external OS dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.	Assured to comply.
(iv)	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines.	Assured to comply
(v)	Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The topsoil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.	Being complied
(vi)	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	Agreed
<b>(g) Green Belt</b>		
(i)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.	Being Complied
(ii)	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. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.	Being complied
<b>(h) Public hearing and Human health issues</b>		
(i)	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six-monthly basis.	Complied
(ii)	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides	Being Complied



	regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.	
(iii)	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.	Being Complied
(iv)	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.	Complied
(v)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Being Complied
<b>(i) Corporate Environment Responsibility</b>		
(i)	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1 <sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.	Complied
(ii)	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/forest /wildlife norms/conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental/forest/wildlife norms/ conditions and/or shareholders/stake holders.	Complied
(iii)	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Complied
(iv)	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	Complied
(v)	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Assured to comply
<b>(j) Miscellaneous</b>		
(i)	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in	Complied



	addition this shall also be displayed in the project proponent's website permanently.	
(ii)	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied
(iii)	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half yearly basis.	Complied
(iv)	The project proponent shall monitor the criteria pollutants level namely, PM10, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Being Complied
(v)	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied
(vi)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.2-11013/5712014-IA.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Being Complied
(vii)	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied
(viii)	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.	Complied
(ix)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Being Complied
(x)	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Being Complied
(xi)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.	Agree to Comply
(xii)	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agree to Comply
(xiii)	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agree to Comply
(xiv)	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agree to Comply



(xv)	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information / monitoring reports.	Agree to Comply
Xvi	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	Agree to Comply.

*R.N.*  
24/02/2022  
(R. N. Anjaan)  
A.S.O.

*A.K.*  
22/02/2022  
(A.K. Yadav)  
R.O.





# JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004

Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

ANNEXURE-6

123  
908

Ref. No:- B-209

Ranchi, Dated:- 25/11/2022

From,

Yatindra Kumar Das,  
Member Secretary.

To,

The Project Officer,  
M/s Amrapali OCP,  
At: - Tandwa, Chatra.

## ORDER

**Sub: - Direction under section 33 (A) of the Water (Prevention and Control of Pollution) Act, 1974 and 31 (A) of the Air (Prevention and Control of Pollution) Act, 1981 - Regarding.**

Whereas, Environmental Clearance was granted for "Amrapali opencast coal mining project of M/s Central Coalfields Ltd. 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" over an ML area of 1426.08 Ha with envisaged rated capacity of mine 12 MTY by MoEF, GoI vide F. No. J-11015/109/2003-IA.II(M) dated 03.01.2006.

Whereas, Environment Clearance was granted under clause 7(ii) of EIA Notification, 2006 for "Amrapali Opencast Coal Mine from 12 MTPA to 14.4 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand)" by MoEF&CC vide MoEF&CC vide F. No. J-11015/109/2003-IA-II(M) dated 20.03.2020.

Whereas, Environmental Clearance was granted for "Expansion of Amrapali Opencast Coal Mine from 14.4 MTPA to 20.16 MTPA (Peak) in an ML area of 619.87 ha of M/s Central Coalfields Limited located in District Chatra (Jharkhand)" by MoEF&CC vide F. No. J-11015/109/2003-IA (M) dated 10.05.2021.

Whereas, the first Consent-to-Establish (CTE) was granted to your Unit by the Board vide Ref No. 3502 dated 09.06.2003.

Whereas, you were granted Consent to Establish (CTE) vide Board's Ref. No. JSPCB/HO/RNC/CTE-7811934/2021/7 dated 08.01.2021. The relevant part of which is as follows:-

PROJECT	SITE AREA		Investment (Rs)	Product & Capacity	Period of CTE
	Plot Nos.	Area			
Before Expansion	As per EC	619.87 Ha (as per EC)	85811 Lacs (as per EC)	Raw Coal - 14.4 MTPA (as per EC granted vide dated 20.03.2020)	Date of issue to six months.

Whereas, the last CTO was granted to your unit vide Board's Ref No. JSPCB/HO/RNC/CTO-10829845/2021/1692 dated 31/12/2021. The relative part of which is as follows:-

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PROJECT	SITE AREA		Investment (Rs)	Product & Capacity	Period of CTO
	Plot Nos.	Area			
Before Expansion	As per EC	619.87 Ha (As per EC)	85811 Lacs (As per EC)	Raw Coal - 14.4 MTPA (as per EC granted vide dated 20.03.2020)	Date of issue to 31/12/2022

Whereas, an Original Application No. 28/2020/EZ Sanjay Chauhan versus Central Coalfields Ltd. & Ors. (Amrapali Opencast Coal Mining Case) has been filed by the applicant before the Hon'ble NGT, Eastern Zone Bench, Kolkata pointing out non-compliance of the conditions of the environment clearance dated 03.01.2006 granted by the MoEF & CC in favour of the Central Coalfields Ltd. for the Amrapali Opencast Coal Mine situated in Karanpura region of Jharkhand State. The first hearing of which was held on 11.05.2020. In which the Hon'ble Tribunal constituted a Committee comprising of the following: -

- (i) Regional office, MoEF & CC, Ranchi
- (ii) Regional office, CPCB, Regional office, Kolkata
- (iii) The Jharkhand State Pollution Control Board
- (iv) Dr. Sharad Lele, Member of the Expert Appraisal Committee, MoEF & CC.

The committee was directed to visit the project in question, verify on the factual aspects and submit a report.

Whereas, the committee has visited the site (Amrapali Open Cast Project) on 01/09/2021 and submitted its report (Copy of Committee's Report already shared).

Whereas, in light of the committee's report a show cause notice was issued to the Unit vide Board's Ref. No. B-1992 dated 14.12.2020 for the non-compliance observed during the site inspection which is as follows: -

- 1) No Railway siding and CHP has been constructed till date. Whereas, you had been directed to construct the same as per EC granted dated 03.01.2006; thereby coal is being transported through road to Shivpur railway siding which causes coal dust to be flowing off the road into forest areas and agricultural fields, nallahs and ponds;
- 2) The Shivpur railway siding does not complies with the CPCB's 2015 guidelines for environmental management of railway siding; the water sprinkling in railway siding is done through bore well which do not have CGWA clearance;
- 3) Development of green belt in and around the mine site was found completely inadequate;
- 4) No measures have been taken to prevent the surface runoff;
- 5) Retaining wall constructed around Honhe OB dump and Binglat OB dump has not been constructed in proper manner; gaps have been left and the wall was found very weak; which may result flowing of silt to outside area/low lying area;
- 6) Catch drain and siltation pond has also been constructed around the Honhe OB dump but at one place, it was found that the flow from the catch drain was directed out of the project boundary, without any sedimentation tank, which may result flowing of water with silt to low lying area and ultimately to the nearby river;
- 7) Road construction at Honhe OB dump was done using material excavated from material OB dump resulting in loss of grass cover and rendering the slope of the dump unstable;
- 8) The weigh bridge area is situated in located at higher elevation from which runoff (from rain and sprinklers) will end up in low lying areas and eventually into the river; No catch drain or walls around this area and water carrying coal flows in the low lying area and ultimately to river Barki;
- 9) Regular monitoring of ground water level and quality is nor being carried out by establishing a network of existing wells and constructing new piezometers.

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Whereas, in response to the show cause notice you had submitted your compliance report vide your Ref. No. PO/Amrapali/EC(NGT)/Compliance/2020-21/2544 dated 29.12.2020.

Whereas, the Regional Officer, JSPCB Regional Office, Hazaribagh was directed to submit a verification report specifically in the light of the reply submitted by the Unit vide Board's Ref. No. - B - 04 dated 01/01/2021.

Whereas, the Regional Officer, JSPCB Regional Office, Hazaribagh was again directed to submit the current Compliance Status Report Vide Board's Ref. No. B - 1146, Ranchi, dated 16.08.2021.

Whereas, the Regional Officer, JSPCB Regional Office, Hazaribagh has submitted the Inspection Report vide his Memo. No. 843 Hazaribagh, dated 19/08/2021. The observations of which is as follows: -

1. Construction of CHP & railway siding -  
For the construction of coal silo and CHP work has been awarded to M/s L. & T Limited and for the railway siding work has been awarded to RITES, time bar is for 2 years.
2. Presently coal is sent to M/s Shivpur Railway Siding approx. 6 kms. away by covered trucks/hyvas. Water spraying is being done on transport route.
3. Toe wall has been constructed around the OB dump at Binglat 1 km length at North-West side of OB dump. Extended toe wall of 450 meters has been under constructed and settling pit 2 nos. constructed to settle the dusts of the run off. Garland drain about 2 km length has been constructed around Honhe dump and settling pit has been constructed at the end.
4. Tree plantation has been done on reclaimed land from beginning to monsoon, 2021. Total 90,000 trees has been planted.
5. Water spraying on haul roads is being done by tankers regularly.
6. PM10 analyzer has been installed for the monitoring of pollutants in Ambient Air. CAAQMS system at project office is under progress.
7. Roof top rain water is collected in rain water harvesting pit.

Whereas, the Regional Officer, JSPCB Regional Office, Hazaribagh was again directed to submit the Inspection Report with clear recommendation with regard to each & every observation made by the Committee Vide Board's Ref. No. B - 2272, Ranchi, dated 27.12.2021.

Whereas, the Regional Officer, JSPCB Regional Office, Hazaribagh has submitted the Inspection Report vide his Memo. No. 10 dated 07/01/2022. The observations of which is as follows: -

Observation regarding non-compliance.	Present Status
1. Non-construction of Coal Handling Plant (CHP), Silo & Railway Siding.	Unit has given the work order to M/s Larsen & Turbo Ltd. for construction of Silo & Coal Handling Plant and for construction of Railway Siding to M/s RITES Ltd. work is under progress.
2. Non-construction of Toe wall, catch drain and settling pit around OB dump.	Toe wall, Garland drain and settling pit has been constructed around the OB dump.
3. Insufficient tree plantation and green belt.	Total 89234 saplings has been planted in

*De*

*Ms*



<p>4. Contaminated run-off flowing into Barki River / Dudhmatia Nalla.</p> <p>5. Spontaneous combustion in coal dump.</p> <p>6. In adequate water sprinklers for controlling fugitive emission.</p>	<p>different location in Amrapali Project during the period from 2015 to 2021.</p> <p>Toe wall, Garland drain and settling pit has been constructed around the OB Dump.</p> <p>Fire fighting arrangement as well as speedy disposal of coal sent to the party.</p> <p>Water spraying on haul road and on the rout of Railway siding is being done by the movable Tankers and 40 nos. fixed water sprinklers. Water is taken from rainwater harvesting pond constructed within the lease hold area.</p> <p>Unit has obtained the permission for withdrawing gound water 4220 m3/d for sprinkling &amp; other purpose.</p> <p>Unit has 5 Tankers of 28 KL, 03 Tankers 12 KL, 10 Tankers 20 KL, 03 Tankers 12 KL, 03 Tankers 8 KL, 01 Tankers 18 KL, 01 Tankers 15 KL.</p>
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Moreover, in light of the above facts it has also been recommended to take action for not constructing Railway Siding, Silo & CHP which is given in EC conditions.

Whereas, the competent Authority has ordered to calculate the Environmental Compensation against your Unit as per the Report of the CPCB In-house Committee on Methodology for Assessing Environmental Compensation and Action Plan to Utilize the Fund. The detail of calculation of Environmental Compensation is detailed as below:-

**Nature of violation** – Discharges in violation of consent conditions, mainly prescribed standards/consent limits.

**Basis to levy the Environmental Compensation** – Pollution Index

The environmental compensation is based on the following formula:

$$EC = PI \times N \times R \times S \times LF$$

Where,

- EC – Environmental Compensation
- PI – Pollution Index of Industrial Sector
- N – Number of days of violation took place
- R – A factor in rupees for EC
- S – Factor of scale of operation
- LF – Location Factor

Now in this case,

PI is to be taken as 75 as the industry belongs to Red category (as per CPCB's guidelines).

N is to be taken as 480 days from 14/09/2020 to 07/01/2022 (N – Number of days of violation took place is the period between the day of violation observed/due date of direction's compliance and the day of compliance verified by CPCB/SPCB/PCC).



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**R** is to be taken as 250 (as per CPCB's guidelines).

**S** is to be taken 1.5 as the unit belongs to Large Scale Unit as per Notification No. - S.O. 170(E).—dated 01/06/2020 of Ministry of Micro, Small and Medium Enterprises (S could be 0.5 for micro or small, 1.0 for medium and 1.5 for large units as per CPCB Guidelines).

**LF** is to be taken as 1.00 as the total population of Tandwa is less than one million as per Census Data 2011 (District Census Handbook, Chatra).

Therefore,

$$\begin{aligned} \text{EC (Per day)} &= \text{PI} \times \text{R} \times \text{S} \times \text{LF} \\ &= 75 \times 250 \times 1.5 \times 1 \\ &= \text{INR } 28,125.00 \end{aligned}$$

Henceforth, the Environmental Compensation for one day comes out to be INR 28,125.00 So the total Environmental compensation for 480 days comes out to be **INR 1,35,00,000.00** (i.e. **Rupees One Crore Thirty Five Lakhs only**).

Now, therefore, in view of the above and by exercising the powers conferred under section 33 (A) of the Water (Prevention and Control of Pollution) Act, 1974 and under section 31 (A) of the Air (Prevention and Control of Pollution) Act, 1981; it is hereby directed to deposit the Environmental Compensation of **INR 1,35,00,000.00** (i.e. **Rupees One Crore Thirty Five Lakhs only**) within 30 days of issuance of this letter, in case of failure to do so an interest of 12 % per annum will be charged and legal action may be initiated.

This issues with the approval of Competent Authority.

sd/-  
(Yatindra Kumar Das)  
Member Secretary

Memo No....*13-209*

Ranchi, Dated...*25/11/2022*

**Copy to:** The Regional Officer, JSPCB Regional Office – cum – Laboratory, Hazaribagh for information and necessary action from his end.

(Yatindra Kumar Das)  
Member Secretary

