

पत्र संख्या—एच.आई.एल./सी.सी.एम./2025—26/89

दिनांक : 26.09.2025

सेवा में,

वन प्रमण्डल पदाधिकारी,
लातेहार वन प्रमण्डल,
लातेहार।

विषय :— मेसर्स हिण्डाल्को इण्डस्ट्रीज लिमिटेड द्वारा वन (संरक्षण) अधिनियम, 1980 के तहत लातेहार वन प्रमण्डल अंतर्गत चकला कोल ब्लॉक के लिए प्रस्तावित रेल मार्ग एवं सड़क मार्ग निर्माण हेतु 6.80 हे० वन भूमि अपयोजन प्रस्ताव (FP/JH/RAIL/156521/2022) के संबंध में।

प्रसंग :— 1. वन प्रमण्डल पदाधिकारी, लातेहार वन प्रमण्डल, का पत्रांक 1719 दिनांक 18.07.2025।
2. प्रधान मुख्य वन संरक्षक—सह—कार्यकारी निदेशक, बंजर भूमि विकास बोर्ड, झारखण्ड, राँची का पत्रांक 573 दिनांक 07.07.2025।

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के संबंध में कहना है कि, मेसर्स हिण्डाल्को इण्डस्ट्रीज लिमिटेड द्वारा चकला कोल ब्लॉक के लिए प्रस्तावित रेल एवं सड़क मार्ग निर्माण हेतु 6.80 हे० वन भूमि अपयोजन प्रस्ताव में की गयी पृच्छा का निराकरण निम्नवत है :—

क्र०	बिन्दुवार पृच्छा	पृच्छा का निराकरण																											
1	परियोजना प्रस्ताव में KML File के अनुसार प्रस्तावित रेलवे ट्रैक के बीच से रोड गुजर रही है, जिसमें या तो Overbrige या रेलवे क्रोसिंग का निर्माण किया जाना होगा। प्रस्ताव के पार्ट—1 के कंड़िका—B-2.4 में प्रयोक्ता अभिकरण द्वारा Component Wise Breakup में रेल और रोड दर्शाया गया है। रोड का Component जैसे—Bridge, Culvert, Shoulder, Pavement, Black Top, flank इत्यादि, एवं रेल का Component जैसे—Track, Railway line & its embankment, CHP & Ground Bunkers, Silo, Cabin, TMS Room इत्यादि दर्शाया जाना अपेक्षित है।	प्रस्ताव के पार्ट—1 के कंड़िका—B-2.4 में Component Wise Breakup स्पष्ट कर दिया गया है :— <table border="1"> <thead> <tr> <th>Component</th><th>Forest Area (Ha.)</th><th>Non-Forest Area (Ha.)</th></tr> </thead> <tbody> <tr> <td>Rail Bridge (RUB)</td><td>0.0000</td><td>0.0070</td></tr> <tr> <td>Rail Bridge</td><td>0.1010</td><td>0.0010</td></tr> <tr> <td>Track Railway line</td><td>1.2545</td><td>0.8130</td></tr> <tr> <td>Railway line Embankment</td><td>4.7808</td><td>2.7078</td></tr> <tr> <td>Road Bridge</td><td>0.0037</td><td>0.0013</td></tr> <tr> <td>Road Black Top</td><td>0.3630</td><td>0.5230</td></tr> <tr> <td>Road Shoulder</td><td>0.2970</td><td>0.4269</td></tr> <tr> <td>Total</td><td>6.8000</td><td>4.4800</td></tr> </tbody> </table>	Component	Forest Area (Ha.)	Non-Forest Area (Ha.)	Rail Bridge (RUB)	0.0000	0.0070	Rail Bridge	0.1010	0.0010	Track Railway line	1.2545	0.8130	Railway line Embankment	4.7808	2.7078	Road Bridge	0.0037	0.0013	Road Black Top	0.3630	0.5230	Road Shoulder	0.2970	0.4269	Total	6.8000	4.4800
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Hindalco Industries Limited

Vasundhara Mega Mart, 2nd Floor, Near Argora Chowk, P.S-Argora, Ranchi-834002 (Jharkhand)

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Unit Head

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क्र०	बिन्दुवार पृच्छा	पृच्छा का निराकरण
2	Village Wise Cadastral Map अपलोड नहीं किया गया है। इसे अपलोड किया जाना अपेक्षित है।	प्रस्ताव के Additional documents के क्रमांक संख्या -31 में Village Wise Cadastral Map अपलोड कर दिया गया है।
3	प्रयोक्ता अभिकरण द्वारा परियोजना प्रस्ताव के पार्ट-1 के कंडिका-B.1 में पूर्व के प्रस्तावों का विवरण अंकित नहीं है।	पूर्व में चकला कोल ब्लॉक के लिए रेल एवं सड़क परियोजना से संबंधित कोई भी प्रस्ताव नहीं है। इसलिए परियोजना प्रस्ताव के पार्ट-1 के कंडिका-B.1 में पूर्व के प्रस्तावों का विवरण अंकित नहीं किया गया है।
4	पक्की रोड पूर्व से मौजूद है तो रेलवे कोरिडोर बनाये जाने का औचित्य स्पष्ट नहीं किया गया है।	रेलवे कोरिडोर बनाये जाने से स्थानीय/निकटवर्ती क्षेत्रों में वायु प्रदूषण (डस्ट) एवं ध्वनि प्रदूषण में नियंत्रण रहेगा। साथ ही चकला कोल ब्लॉक के पर्यावरण स्वीकृति अनुमोदन के क्रम में 19 वी EAC (Expert Appraisal Committee) मीटिंग दिनांक 23 सितम्बर 2021 के रिपोर्ट में बिन्दु क्रमांक 4 (xii) में "PP shall submit detailed project report for implementation of railway siding for evacuation of coal with its target date of completion. Target date should be such that railway siding should be operational within 2 years of commissioning of mine operations. Forest Clearance shall be submitted if railway siding land comes under forest land". के अनुसार कोल सम्प्रेषण/परिवहन के लिए 2 वर्ष के अन्दर रेलवे साईडिंग निर्माण किये जाने का निर्देशित किया गया है। EAC रिपोर्ट संलग्न है। अनुलग्नक-1
5	DSS के अवलोकन से यह पता चलता है कि परियोजना के लीज क्षेत्र में पूर्व से ही ग्रामीण सड़क (Black Top) मौजूद है। इसके बावजूद प्रस्ताव में एक अलग से वनभूमि में सड़क निर्माण हेतु प्रस्तावित किये जाने औचित्य बताया जाय।	परियोजना के लीज क्षेत्र में पूर्व से ही निर्मित ग्रामीण सड़क (Black Top) की चौड़ाई 3.75 मीटर होने के कारण एवं घनी आबादी के बीच से गुजरने के कारण कोल सम्प्रेषण/परिवहन का कार्य संभव नहीं है। साथ ही चकला कोल ब्लॉक के पर्यावरण अनुमोदन के क्रम में Minutes of 46 th EAC (Expert Appraisal Committee) मीटिंग दिनांक 26 एवं 27 सितम्बर 2023 के रिपोर्ट में Air quality monitoring and mitigation measure के बिन्दु क्रमांक-03 "The transportation of coal shall be carried 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 constructed so that the impact of sound, dust


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 Chakla Coal Mines, Chandwa

क्र०	बिन्दुवार पृच्छा	पृच्छा का निराकरण
		and accidents could be appropriately mitigated." इसलिए नवीन सड़क निर्माण हेतु प्रस्ताव समर्पित किया गया है। EAC रिपोर्ट संलग्न है। अनुलग्नक-2
6	प्रस्ताव में क्षतिपूरक वनरोपण का KML अपलोड नहीं किया गया है।	प्रस्ताव के बिन्दु क्रमांक-L में क्षतिपूरक वनरोपण का KML अपलोड कर दिया गया है।
7	प्रस्ताव में वनप्रमण्डल पदाधिकारी, सिमडेगा वन प्रमण्डल का CA Suitability तीन वर्ष पूर्व का है। वर्तमान समय में इसका उपयोगिता एवं अद्यतन स्थिति अपेक्षित है।	प्रस्ताव में समर्पित क्षतिपूरक वनरोपण हेतु उपयुक्ता प्रमाण पत्र एवं 20 वर्षीय प्राकलन से संबंधित अद्यतन स्थिति वनप्रमण्डल पदाधिकारी, सिमडेगा वन प्रमण्डल के पत्रांक 1457 एवं 1717 दिनांक 14.07.2025 एवं 08.08.2025 के माध्यम से उपलब्ध कराई गयी है। अनुलग्नक-3
8	प्रस्ताव का कुछ एरिया रेलवे का भू-भाग के अन्दर पड़ रहा है। इस एरिया में रेलवे कोरिडोर निर्माण हेतु रेलवे से निर्गत अनापत्ति प्रमाण पत्र अप्राप्त है।	प्रस्ताव में रेल निर्माण हेतु रेलवे के भू-भाग के अन्दर कार्य हेतु रेलवे विभाग से अनुमोदन प्राप्त कर लिया गया है। जिसकी प्रति संलग्न है। अनुलग्नक-4
9	वन प्रमण्डल पदाधिकारी, लातेहार वन प्रमण्डल एवं वन संरक्षक, प्रादेशिक अंचल, मेदिनीनगर के स्थलीय निरीक्षण प्रतिवेदन में प्रस्तावित परियोजना हेतु Elevated Road & Rail line निर्माण होने का सूचना दिया गया है, परन्तु प्रयोक्ता अभिकरण द्वारा किस जगह Elevated Road & Rail line निर्माण होगा, इसका उल्लेख नहीं किया गया है। इसका प्रस्ताव में दर्शाया जाना अपेक्षित है।	रेल परियोजना के संरक्षण का रेलवे विभाग से अनुमोदन की प्रति प्रस्ताव के साथ पूर्व में संलग्न किया गया है। जिसमें यह दर्शाया है कि वर्तमान टोरी-शिवपुर रेल लाईन में बिराटोली स्टेशन के पश्चात Take off Point के Elevation/Level के अनुसार प्रस्तावित रेल कोरिडोर में कटिंग व फिलिंग कार्य के माध्यम से भूमि का समतलीकरण कर रेल लाईन निर्माण किया जाएगा। प्रस्तावित रेल एवं सड़क मार्ग की कुल लंबाई 3.359 कि०मी० में से लीज क्षेत्र के बाहर 1.647 कि०मी० एवं लीज क्षेत्र के अन्दर 1.712 कि०मी० है। लीज क्षेत्र के अन्दर के भू-भाग में वर्तमान ग्रामीण सड़क को Crossing हेतु Over Bridge (ROB) के निर्माण का रेल संरक्षण में अनुमोदित किया गया है। रेल संरक्षण का अनुमोदित प्रति संलग्न है। अनुलग्नक-5

अतः श्रीमान जी से अनुरोध है कि, चकला कोल ब्लॉक के लिए प्रस्तावित रेल एवं सड़क मार्ग निर्माण हेतु 6.80 हे० वन भूमि अपयोजन प्रस्ताव में की गयी पृच्छा का बिन्दुवार निराकरण प्रतिवेदन अग्रिम कार्यवाही हेतु सादर समर्पित है।

सधन्यवाद !

अनुलग्नक : यथोक्त (8 प्रतियों में)।

विश्वासभाजन

अधिकृत अधिकारी

हिण्डाल्को इण्डस्ट्रीज लिमिटेड
चकला कोल ब्लॉक, चंदवा, लातेहार।

DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

F.No. IA-J-11015/1072/2007-IA-II(M)

Government of India

Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,

Jorbagh Road, New Delhi - 3

Email: lk.bokolia@nic.in Tel: 01124695363

Dated: 11th October, 2021

To,

The Assistant Vice President Mining
M/s Hindalco Industries Limited,
Ahura Centre, 1st Floor, B Wing,
Mahakali Caves Road, Andheri (East),
Mumbai-400093 (Maharashtra)
Email: sachin.s.sharma@adityabirla.com

Sub: Chakla Opencast Coal Block Mine (North Karanpura Coalfield) with production capacity of 4.5 MTPA in ML area 863 ha of M/s Hindalco Industries Limited located at villages Chakla, Hariyatoli, Nawatoli, Amwatanr and Ambuatanr, Tehsil Chandwa, District Latehar (Jharkhand) - Terms of Reference- reg

Sir,

This has reference to your Online Proposal No. IA/JH/CMIN/227353/2021 dated 3rd September, 2021, on the above-mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of Terms of Reference to Chakla Opencast Coal Block Mine (North Karanpura Coalfield) with production capacity of 4.5 MTPA in ML area 863 ha of M/s Hindalco Industries Limited located at villages Chakla, Hariyatoli, Nawatoli, Amwatanr and Ambuatanr, Tehsil Chandwa, District Latehar (Jharkhand).

3. The proposal was considered by the sectoral Expert Appraisal Committee (EAC) in the Ministry in its 19th EAC meeting held on 23rd September, 2021 through Video Conferencing. 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 B/7, 73 B/8, 73 B/11, 73 B/12 and is bounded by the geographical coordinates ranging from latitude 23°43'01"N to 23°44'55"N and longitude 84°47'11"E to 84°49'52"E.
- (ii) The coal produced from this Mine can be used for Commercial Purpose as well as for captive consumption in the end use plants.
- (iii) Company is incorporated as Public Limited Company under Company's Act and no Joint venture cartel is formed.

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- (iv) Project does not fall in the Critically Polluted Area (CPA) where the MoEF&CC's vide its OM dated 13.01.2010 has imposed moratorium on grant of environment clearance.
- (v) It is proposed to operate the Chakla Coal Mine by opencast method of mining for which there is a potential of direct employment (Departmental & contractual) of 150 persons in technical & non-technical categories. It is also expected that the project will generate indirect employment to about 1500 persons.
- (vi) The project will bring overall socio-economic development of the area by way of generation of employment, improvement in social, health, education, infrastructure and skill developmental activities undertaken by the project proponent under its CSR agenda. All this will help in uplifting the standard of living and well-being of the community. The project will also contribute towards adding revenue to the state by way of statutory payments. Commissioning of the project will fulfill the vision of our Hon'ble Prime Minister for reducing import of coal in India, thus substantiating the country's mission towards "Atmanirbhar Bharat".
- (vii) For R & R, policy shall be prepared as per Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 and Jharkhand R & R Policy. The plan shall be duly approved by the District Administration as well.
- (viii) This is a Greenfield Coal Mining Project and process of obtaining EC is under progress.
- (ix) Earlier, the ToR was granted in favor of M/s. Essar Power (Jharkhand) Limited dated 15.02.2008.
- (x) This is an Auction Block and as per Mine Dossier, Total Block Area is 863 ha, in which 504.02 ha is Forest land, 80.34 ha is Govt. Land and 278.64 ha Pvt. Land. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the Ministry of Coal, Government of India dated 10.06.2008.
- (xi) The land usage pattern of the project is as follows:

Pre-mining land use details (Area in Ha)

S. No.	Land Use	Within ML Area (ha)	Outside ML Area (ha)	Total (ha)
1.	Agricultural Land	212.68	-	212.68
2.	Forest Land	504.02	-	504.02
3.	Wasteland	69.73	-	69.73
4.	Grazing Land	0.0	-	0.0
5.	Surface water bodies	6.06	-	6.06
6.	Settlements (Township / villages)	31.46	-	31.46
7.	Road	6.45	-	6.45
8.	Others (community use etc)	32.60	-	32.60
	Total	863.00	-	863.00

Post Mining Land use

Land Use	Land Use (ha)
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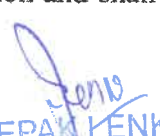
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Chakla Coal Mines, Chandwa

S. No.		Plantation	Water Body	Public Use	Undisturbed	Total
1.	External OB Dump	-	-	-	-	-
2.	Top soil Dump	-	-	-	-	-
3.	Excavation	362 + 130.01*+ 9.59**	25			526.6
4.	Roads	-	-	6.45	-	6.45
5.	Built-up Area	-	-	73.07	-	73.07
6.	Undisturbed Area	-	-	-	76.50	76.50
7.	Greenbelt	61.85	-	-	-	61.85
8.	Nala Diversion	-	3.78	-	-	3.78
9.	Non-Mineralized Zone	114.75	-	-	-	114.75
10.	Staff Colony	-	-	-	-	-
Total		678.2	28.78	79.52	76.50	863

NB- 362 ha backfilled area, *130.01 Ha in slopes and bater and **9.59 ha safety zone.

- (xii) Total geological reserve reported in the mine lease area is 83.101 MT with 75.51 MT mineable reserve. Out of total mineable reserve of 75.51 MT, 71.14 MT are available for extraction. Percent of extraction is 85.6% of Geological Reserves.
- (xiii) There are total 4 no. of coal seams with average thickness ranging from 0.47 m to 4.43 m are workable. Grade of coal is G-E (0.01 Million Tonne), G-F (17.15 Million Tonne) & G-G (53.98 Million Tonne). Stripping ratio (coal: overburden) is 1:4.46 while seam gradient is 1 in 10.
- (xiv) Mining will be done by fully mechanized opencast mining method with the use of surface Miner.
- (xv) Life of Mine is 20 years (From the date of commencement of coal production).
- (xvi) The project will have one temporary external dump during the operational period in an area of 114.75 ha with 592 m AMSL and 50.54 Million m³ of Overburden which will be rehandled from the 8th year onwards. 1 internal dump of OB in an area of 362 ha with 266.87 Million m³ will be formed from 5th year onwards.
- (xvii) Total quarry area is 526.6 ha (including safety zone of 9.59 ha) out of which backfilling will be done in 362 ha while final mine void will be created in an area of 25 ha with a depth of 194 m. Backfilled quarry area of 362 ha shall be reclaimed with plantation along with 130.01 ha of pit & dump slopes & batter. Final mine void will be converted into waterbody.
- (xviii) The 71.14 Million tonne coal to be excavated will be transported to CHP Complex for temporary storage by dumpers and then to proposed railway siding within the mining lease area for further transportation to end use plant/ commercial sale through rail. As an alternate arrangement, road will also be constructed for coal transportation and shall be connected to NH 22.

(16)


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- (xix) Reclamation Plan in an area of 678.2 ha, comprising of 114.75 ha of external dump, 362 ha of internal dump, 61.85 ha of green belt and 130.01 ha of dump & pit slopes & batter. In addition to this, an area of 9.59 ha, included in the safety zone/rationalization area, has also been proposed for green belt development.
- (xx) 504.02 Ha of forest land has been reported to be involved in the project. Forest Clearance is in process. MoEFCC vide its letter no 8-06/2014-FC dated 17th Aug 2021 has asked GoJ to update the earlier FD proposal on the name of HIL and forward it to MoEFCC with their recommendations.
- (xxi) There is no National Park, wildlife sanctuaries and Eco-sensitive zones falling within 10 km boundary of the project.
- (xxii) Study for wildlife conservation and authentication is under process.
- (xxiii) The ground water level has been reported to be varying between 8 m to 12 m during pre-monsoon and between 5 m to 8 m during post-monsoon. Total water requirement for the project is 1100 KLD.
- (xxiv) NOC from Groundwater Professional of CGWA will be obtained after issuance of TOR/directive of MoEF & CC.
- (xxv) Public hearing for the project of 4.5 Million TPA was conducted on 29.06.2009 by JSPCB in the name of M/s. Essar Power Jharkhand Limited. Later the Coal block was deallocated.
- (xxvi) Mahalania Nala runs from North to South in a meandering course and exits the block from South Western boundary to meet its natural course and other small streamlets falls within the lease area. This Nala is proposed to be diverted along the Eastern and Western boundary of the block in consultation with the Water Resource Department of the State Government.
- (xxvii) Baseline Monitoring has been carried out for Summer Season (March to May, 2021), The results of ambient air quality monitoring data were found within prescribed limits which can be attributed to the specific local conditions during the day of sampling.
- (xxviii) No Court cases, violation cases are pending against the project of the PP.
- (xxix) The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder. The coal production will be started after obtaining Environment Clearance and other requisite consents from the concerned authorities.
- (xxx) The project involves 211 project affected families. R&R of the PAFs will be done as per the Central & State's policy.
- (xxxi) Total cost of the project is Rs. 1173 Crore. Cost of production is Rs 1100/tonne. CSR cost is Rs 2 Crore/annum. R& R cost is Rs. 51 Crore. Environment Management Cost is Rs 15.5 Crore (Capital) & 1 Crore (Recurring).

4. The sectoral Expert Appraisal Committee in its 19th EAC meeting held on 23rd September, 2021, through Video Conferencing has recommended the proposal for grant of Terms of References (ToR). Based on the recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby grants approval to the Terms of References for **Chakla Coal Block Mine (North Karanpura Coalfield) with production capacity of 4.5 MTPA in ML area 863 ha of M/s Hindalco Industries Limited located at villages Chakla, Hariyatoli, Nawatoli, Amwatanr and Ambuatanr, Tehsil Chandwa, District Latehar (Jharkhand)**, for preparation of EIA/EMP

reports, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto, subject to the compliance of the following terms and conditions as specified/notified in the standard ToR applicable for opencast coal mines, along with the additional conditions as under:-

- (i) PP shall issue public notice in local media, newspapers (English, Hindi and local language Report through concerned SPCB in the concerned districts as per the provisions/procedure contained in the EIA Notification, 2006 for information of the stakeholders about the present coal mining operations inviting comments and their redressal. All the issues raised and PP reply should be incorporated in EIA.
- (ii) PP shall prepare adequate EMP addressing the issues raised in the last public hearing including redressal of public comments arising from public notices and provide sufficient budgetary provision to implement the plan.
- (iii) PP shall not divert the tributary no 6 of Mahalanallah located towards south before 15 years of the mine life. Adequate protection measures shall be proposed in EIA Report.
- (iv) A detailed hydrological survey of the Mahalanallah, regarding its catchment area, flow volume and length of the stretch to be diverted to be provided with proper diversion plan in EIA/EMP report.
- (v) Stage-I Forest Clearance for diversion for non-forestry activity shall be submitted.
- (vi) PP shall prepare the Mining Plan in such a manner that condition prescribed by EAC shall intact from environment point of view. EIA-EMP shall accordingly be prepared on the suggested stipulation with point-wise compliance & in accordance with recommendations of Mining Plan
- (vii) PP should submit the real time aerial footage and video of the Mining lease area made through drone with a special focus on the area adjacent to the rivers.
- (viii) In addition to existing data already collected (if any), the Cumulative Impact Assessment Study, carrying capacity, ecosystem services study and biodiversity study of the area shall be carried over by project proponent. PP shall collect one season baseline data of all environmental parameters and shall compare with the data of earlier data collected for cumulative assessment of area. Air pollution impact predication shall be conducted by considering the maximum values.
- (ix) PP shall explore the possibilities of utilization of OB material for different purposes (in construction of roads, manufacture of artificial sand, aggregates, use for farmers etc.) and accordingly Plan shall be included in EIA/EMP Report.
- (x) PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs.
- (xi) Inpit conveyor belt with silo loading should be proposed and installed for transportation of coal till railway siding. No transportation of coal by trucks/dumpers shall be proposed in EIA/EMP.
- (xii) PP shall submit detailed project report for implementation of railway siding for evacuation of coal with its target date of completion. Target date should be such that railway siding should

be operational within 2 years of commissioning of mine operations. Forest Clearance shall be submitted if railway siding land comes under forest land.

- (xiii) PP shall prepare a Damage assessment (likely due to mining activity) i.e. augmentation report on Natural resources including the carrying capacity of river and stream passing by with its catchment area, its mitigation measures
- (xiv) Wind rose pattern in the area should be reviewed and accordingly location of AAQMS shall be planned by the collection of air quality data. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area.
- (xv) Project proponent to prepare Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
- (xvi) PP shall provide the details of mining technology/methodology proposed to be adopted for coal mining operations and its associated environmental benefits of using from Climate Change perspective.
- (xvii) Detailed Social Impact Assessment shall be prepared in villages for Rehabilitation and Re-settlement. R & R Activity shall be proposed with timeline and allotted fund with the approval of District Commissioner/collector.
- (xviii) Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA) only for mining activity.
- (xix) Heavy metals including other parameters in surface water quality shall be analyzed and provided in EIA Report. Further, detailed mineralogical and chemical composition of the mineral and percentage of free silica from a NABL/MoEF&CC accredited laboratory
- (xx) PP shall be submitting R & R in respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programs prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government.
- (xxi) PP should clearly bring out that what is the specific diesel consumption ~ (Liters/Tonne of total excavation & mineral) and steps to be taken for reduction of the same. Year-wise target for reduction in the specific diesel consumption needs to be submitted.
- (xxii) PP shall provide provision of integrated mine plan and mine reclamation cum land form / land scape plan for both underground and open cast coal mining projects. The plan must show the predicted post mining reclaimed and reformed surface by regarding and reshaping to reduce its height as close to the original surface level and proper sloping benching and terracing of external dump should be clearly brought out in the post mine closure plan. This would also include water management strategies such as surface water catchment and drainage paths etc. of post mining land surface. The final mine void shall be reduced and brought as near as ground so that land can be restored and reclaimed
- (xxiii) PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of coal.
- (xxiv) PP shall submit letter from PCCF that mine does not fall under corridors of any National Park and Wildlife Sanctuary and does not involve any violation of forest area and wild sanctuary with certified map showing distance of nearest sanctuary

- (xxv) Details of toe wall and garland drain to be constructed along the OB dump.
- (xxvi) Reclamation to be done using geo-texturing technique of the dumps close to habitation and a cause of visual intrusion.
- (xxvii) Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted.
- (xxviii) PP should bring out the awareness campaign to be carried out on various Environmental issues, practical training facility to be provided to the environmental engineer/diploma holders, mining engineer/diploma holders, geologists, and other trades related to mining operations. Target for the same needs to be submitted.
- (xxix) Details of water spraying (static water sprinklers) at coal stock yard and along the permanent haul road.
- (xxx) Details of black topping of permanent haul roads.
- (xxxi) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.

4.1. This grant of Terms of References (ToR) for the said project is further subject to the general conditions as under

- (i) All documents should be properly indexed, page numbered.
- (ii) Period/date of data collection should be clearly indicated.
- (iii) Authenticated English translation of all material provided in Regional languages.
- (iv) The copy of the letter received from the Ministry on the ToR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.
- (v) General Instructions for the preparation and presentation before the EAC of ToR/EC projects of Coal Sector should be incorporated/followed.
- (vi) The aforesaid ToR has a validity of **Four** years only.
- (vii) Grant of ToR does not necessarily mean grant of EC.
- (viii) Grant of ToR to the present project does not necessarily mean grant of TOR/EC to the captive/linked project.
- (ix) Grant of ToR to the present project does not necessarily mean grant of approvals under the Forest (Conservation) Act, 1980 or the Wildlife (Protection) Act, 1972.
- (x) Grant of EC is also subject to circulars issued under the EIA Notification 2006, which are available on the Ministry's website: www.envfor.nic.in

5. Standard ToR: The EIA/EMP report should contain the information in accordance with provisions & stipulations as given in the standard ToR for Opencast coal mine projects (please visit the following link to download the Standard ToR:

<http://environmentclearance.nic.in/writereaddata/standardtorreference.pdf>

6. You are required to submit the final EIA/EMP prepared as per TORs to the Ministry within 4 years as per this Ministry's Notification vide S.O 751 (E) dated 17th February, 2020 for considering the proposal for environmental clearance.

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7. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization(s)/laboratories including their status of approvals etc. vide Notification of the MoEF dated 19th July, 2013.


(Lalit Bokolia)
Director

Copy to:

1. The Secretary, Department of Environment & Forests, Government of Jharkhand, Secretariat, Ranchi
2. The Additional Principal Chief Conservator of Forests, Regional office (ECZ), Ministry of Environment & Forests, Bungalow No. A-2, Shyamali Colony, Ranchi - 834002
3. The Member Secretary, Jharkhand State Pollution Control Board, TA Building, HEC Complex, PO Dhurwa, Ranchi
4. The District Collector, Latchar, Government of Jharkhand (*with request to put it on District website*).
5. Monitoring File/Guard File/Record File.


(Lalit Bokolia)
Director


DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

A. Generic TOR for an opencast / UG coalmine project

- (i) An EIA-EMP Report should be prepared for a peak capacity of MTPA over an area of ha addressing the impacts of the underground coalmine project including the aspects of mineral transportation and issues of impacts on hydrogeology, plan for conservation of flora/fauna and afforestation/plantation programme based on the generic structure specified in Appendix III of the EIA Notification 2006..Baseline data collection can be for any season except monsoon.
- (ii) The EIA-EMP report should also cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality – air, water, land, biotic community, etc. through collection of baseline data and information, generation of baseline data on impacts for MTPA of coal production based on approval of project/Mining Plan.
- (iii) A Study area map of the core zone and 10km area of the buffer zone (15 km of the buffer zone in case of ecologically sensitive areas) delineating the major topographical features such as the land use, drainage, locations of habitats, major construction including railways, roads, pipelines, major industries/mines and other polluting sources, which shall also indicate the migratory corridors of fauna, if any and the areas where endangered fauna and plants of medicinal and economic importance are found in the area.
- (iv) Map showing the core zone along with 3-5 km of the buffer zone) delineating the agricultural land (irrigated and unirrigated, uncultivable land (as defined in the revenue records), forest areas (as per records) and grazing land and wasteland and water bodies.
- (v) Contour map at 3m interval along with Site plan of the mine (lease/project area with about 3-5 km of the buffer zone) showing the various surface structures such as buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within/adjacent to the ML), green belt and undisturbed area and if any existing roads, drains/natural water bodies are to be left undisturbed along with details of natural drainage adjoining the lease/project and modification of thereof in terms of construction of embankments/bunds, proposed diversion/rechannelling of the water courses, etc., highways, passing through the lease/project area.
- (vi) Original land use (agricultural land/forestland/grazing land/wasteland/water bodies) of the area. Impacts of project, if any on the landuse, in particular, agricultural land/forestland/grazing land/water bodies falling within the lease/project and acquired for mining operations. Extent of area under surface rights and under mining rights.

S.N.	ML/Project Land use	Area under Surface Rights (ha)	Area Under Mining Rights (ha)	Area under Both (ha)
1.	Agricultural land			
2.	Forest Land			
3.	Grazing Land			
4.	Settlements			
5.	Others (specify)			

Area Under Surface Rights


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S.N.	Details	Area (ha)	Forest Land	Agr. land	Wasteland	Settlements	Others
1.	Buildings						
2.	Infrastructure						
3.	Roads						
4.	Others (specify)						
	TOTAL						

- (vii) Study on the existing flora and fauna in the study area carried out by an institution of relevant discipline and the list of flora and fauna duly authenticated separately for the core and buffer zone and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna. The flora and fauna details should be furnished separately for the core zone and buffer zone. The report and the list should be authenticated by the concerned institution carrying out the study and the names of the species scientific and common names) along with the classification under the Wild Life Protection Act, 1972 should be furnished.
- (viii) Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working plan/scheme until end of mine life should be reflected on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps should also be included.
- (ix) Impact of mining on hydrology, modification of natural drainage, diversion and channelling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
- (x) Collection of one-season (non-monsoon) primary baseline data on environmental quality – air (PM₁₀, PM_{2.5}, SO_x, NO_x and heavy metals such as Hg, Pb, Cr, AS, etc), noise, water (surface and groundwater), soil along with one-season met data.
- (xi) Map of the study area (core and buffer zone) clearly delineating the location of various monitoring stations (air/water/soil and noise – each shown separately) superimposed with location of habitats, wind roses, other industries/mines, polluting sources. The number and location of the stations should be selected on the basis of the proposed impacts in the downwind/downstream/groundwater regime. One station should be in the upwind/upstream/non-impact non-polluting area as a control station. Wind roses to determine air pollutant dispersion and impacts thereof shall be determined. Monitoring should be as per CPCB guidelines and standards for air, water, noise notified under Environment Protection Rules. Parameters for water testing for both ground and surface water should be as per ISI standards and CPCB classification of surface water wherever applicable.
- (xii) Impact of mining and water abstraction and mine water discharge in mine on the hydrogeology and groundwater regime within the core zone and 10km buffer zone including long-term modelling studies on the impact of mining on the groundwater regime. Details of rainwater harvesting and measures for recharge of groundwater should be reflected wherever the areas are declared dark/grey from groundwater development.
- (xiii) Study on subsidence, measures for mitigation/prevention of subsidence, modelling subsidence prediction and its use during mine operation, safety issues.

- (xiv) Detailed water balance should be provided. The breakup of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the competent authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
- (xv) Impact of choice of mining method, technology, selected use of machinery - and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations.
- (xvi) Impacts of mineral transportation – within and outside the lease/project. The entire sequence of mineral production, transportation, handling, transfer and storage of mineral and waste, and their impacts on air quality should be shown in a flow chart with the specific points where fugitive emissions can arise and the specific pollution control/mitigative measures proposed to be put in place. Examine the adequacy of roads existing in the area and if new roads are proposed, the impact of their construction and use particularly if forestland is used.
- (xvii) Details of various facilities to be provided in terms of parking, rest areas, canteen, and effluents/pollution load from these activities. Examine whether existing roads are adequate to take care of the additional load of mineral and their impacts.
- (xviii) Examine the number and efficiency of mobile/static water sprinkling system along the main mineral transportation road within the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality.
- (xix) Impacts of CHP, if any on air and water quality. A flow chart of water use and whether the unit can be made a zero-discharge unit.
- (xx) Conceptual Final Mine Closure Plan along with the fund requirement for the detailed activities proposed there under. Impacts of change in land use for mining operations and whether the land can be restored for agricultural use post mining.

Table 1 Stage-wise Cumulative Plantation

S.N	YEAR*	Green Belt		External Dump		Backfilled Area		Others (Undisturbed Area / etc)		TOTAL	
		Area (ha)	No. of trees	Area (ha)	No. of Trees	Area (ha)	No. of Trees	Area (ha)	No. of Trees	Area (ha)	No. of Trees
1.	1 st year										
2.	3 rd year										
3.	5 th year										
4.	10 th yr										
5.	15 th yr										
6.	20 th yr										
7.	25 th yr										
8.	30 th yr										
9.	34 th year (end of mine life)										
10	34-37 th Year										

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- b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
- d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

67


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Chakla Coal Mines, Chandwa



सत्यमेव जयते

Government of India
Ministry of Environment, Forest and Climate Change
IA Division
(Coal Mining)



**Minutes of 46th Expert Appraisal Committee meeting Coal Mining held from
 26/06/2023 to 27/06/2023**

Date: 10/07/2023

MoM ID: EC/MOM/EAC/541038/6/2023

Agenda ID: EC/AGENDA/EAC/541038/6/2023

Meeting Venue: N/A

Meeting Mode: Virtual

Date & Time:

26/06/2023	10:30 AM	05:30 PM
27/06/2023	10:30 AM	05:30 PM

1. Opening remarks

At the outset, the Chairman welcomed the Expert members & other participants and requested to start the proceeding as per the agenda adopted for this meeting.

2. Confirmation of the minutes of previous meeting

The minutes of the 45th Meeting of the EAC (Coal) held on 31st May 2023 has been confirmed by the Chairman.

3. Details of proposals considered by the committee

Day 1 -26/06/2023

3.1. Agenda Item No 1:**3.1.1. Details of the proposal**

Tubed Coal Mine of 6 MTPA of M/s Damodar Valley Corporation by JAGESH MANDIYE located at LATEHAR, JHARKHAND			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)

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 Indira Paryavaran Bhawan, Jor Bagh New Delhi - 110003

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11.	12.PP to provide bio toilets to the villages located within the study areas within 1 year from the grant of this EC.
12.	13.PP shall deploy atleast 20% of overall fleet of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of coal/OB etc.
13.	14.PP shall conduct feasibility studies for assessment of voids for backfilling of ash and mixing of ash with overburden, taking up backfilling ash and OB mixing activities during operations as well as post closure of mines in line with the Fly Ash Utilization Notification, 2021

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Chakla Opencast Coal Mine (North Karanpura Coalfield) (ML Area: 863 ha) with production capacity of Coal 4.5 MTPA at District: Latehar, State Jharkhand (Greenfield) by HINDALCO INDUSTRIES LIMITED, AHURA CENTRE, 1ST FLOOR, B WING, MAHAKALI CAVES ROAD, ANDHERI (EAST), MUMBAI 400093, INDIA located at LATEHAR, JHARKHAND			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/JH/CMIN/424605/2023	J-11015/1072/2007-IA-II(M)	06/04/2023	Mining of minerals (1(a))

3.2.2. Project Salient Features

46.1.1 The proposal is for Environmental Clearance for Chakla Opencast Coal Block Mine (North Karanpura Coalfield) with production capacity of 4.5 MTPA in ML area 863 ha of M/s Hindalco Industries Limited located at villages Chakla, Hariyatoli, Nawatoli, Amwatanr and Ambuatn, Tehsil Chandwa, District Latehar (Jharkhand).

46.1.2 The proposal was earlier considered in the 43rd EAC meeting held on 24 April 2023 wherein EAC after detail deliberation deferred the proposal for the submission of observation. Reply was submitted on 23.05.2023 such as:-

S.No.	Observation of EAC	Replied by PP
1	Project Proponent to rework on proper estimation of impact due to diversion and revisit the specific condition no. (iii), (iv) and (xiii) for submission of study which will cover the concerns of seepage from diverted channel to existing as well as impact of diversion on the Ecosystem/Environment and the protection of tributary no. 6 of Mahalanianalla. The study shall be redone accordingly.	The specific condition no. (iii), (iv) and (xiii) have been revisited in light of impact due to diversion, seepage due to existing channel, impact on Ecosystem/ Environment, and protection of tributary no 6 of Mahalanianala. The tributary no 6 (based on CWPRS report this tributary named as S5). The Mahalanianala originating near the northern portion of the Chakla coal block flows towards south and meets NagarnadiaNadi, a tributary of Damodar River outside of the coal block boundary. The general slope of the study area is from North to South direction. One tributary namely tributary S2 join Mahalanianala at right bank, Tributary S4 & S5 meet & exit at G point and meet NagarnadiyaNadi outside the block area. All the tributaries & nallas of the block are seasonal except NagarnadiaNadi, which is perennial at places with meagre discharge during dry months. In its further course, the NagarnadiaNadi meets perennial Damodar River and finally discharges into it.

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		Surface Water Availability: The proposed nala diversion has been designed in such a way that there will not be any impact of reduction of rate of peak flood over the relevant diversion area. <i>Mahalanala Pre diversion discharge- 186.59 m³/sec and post diversion discharge 186.59m³/sec.</i>
2	PP needs to submit certificate from the District Magistrate for verifying the existence of forestland covered under the Forest Right Act, 2006 and consequential forestland shall be required for diversion.	Certificate from the District Magistrate for verifying the existence of forestland covered under the Forest Right Act, 2006 has been enclosed.
3	PP needs to clarify from the documents of State Government that the area does not fall under No-Go Area category/zone.	The Area is already categorized as "Go Area" mentioned vide letter No. J-11015/1072/2007-IA.II(M) issued by MoEF & CC dated 22/09/2010. The forest diversion proposal for the project had already been forwarded by State and had been reviewed at FAC, the same has been vested to HIL, vide letter no: File No.8-06/2014-FC, dated 17th Aug 2021 action has been taken by MoEF&CC to carry forward the process of FC of Chakla Coal Mine. We further submit that, vide letter F.No.11-269/2012-PC dated 30/08/2012 issued by forest division of MoEF&CC, the concept of Go-No GO zone has been done away.
4	PP shall submit Letter of Intent in the name of PP from State Government regarding proposed mine lease area	1. The block has been vested to HIL vide Vesting Order No. NA-104/9/ 2020-NA dated 03.03.2021. 2. Mining lease application (Form - D) has been submitted to State Government dated 13.07.2021. 3. Application forwarded to Directorate Mines, Ranchi from DC Latehar dated 26.03.2022 for further process.
5	PP needs to submit the coal reserves available below the forestland lying inside the Mine lease area.	Total geological resources are 83.101 Million Tonnes. Out of the total geological reserves total mineable reserves are 75.51 Million Tonnes and extractable reserves are 71.14 Million Tonnes. Coal reserve available below the forest land are 45.87 Million Tonnes.
6	PP needs to submit the protection plan for villagers lying inside the mine lease area from the mining activities during overlapping period of mining and rehabilitation.	• Habitation of 2 villages i.e. Hariyatoli & Amwatanr and also a part of the Chakla village fall within the project area. • All the population within the project area will be relocated outside of the project area. • There will be no habitation within the project area. The process of R&R has already started. Hence, there is no overlapping involved. • The proposed project area is 786.5 ha.
7	PP needs to submit the coal evacuation plan considering the route should not pass through village area for the initial 3 years i.e. till implementation of railway siding.	• The mine opening permission is envisaged as Aug 2025, in line with schedule of efficiency parameters of CMDPA. Accordingly, coal production is likely to start by Mar 2026. • The railway siding within the block is planned to be commissioned by Mar 2026. Hence, no road transport through the village areas is envisaged. However, alongside the railway track a separate dedicated road


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 Chakla Coal Mines, Odisha

		corridor is planned and is in the process of approval and same will be used for coal transportation during initial 3 years. ESP (Engineering Scale Plan) & DPR (Detailed Project Report) for the proposed railway siding is approved by Railways.
8	PP needs to revisit and conform that current mine plan is in compliance to discussion held during Terms of References i.e a per ToR(vi) covering all items prescribed in TOR. Therefore, PP shall submit the Mine Plan and Mine Closure Plan as per observation of EAC and latest guidelines of Ministry of Coal.	As per ToR specific condition no (vi) "PP shall prepare the Mining Plan in such a manner that condition prescribed by EAC shall be intact from environment point of view. EIA- EMP shall accordingly be prepared on the suggested stipulation with point-wise compliance & in accordance with recommendations of Mining Plan". Conditions mentioned in ToR has been already incorporated within the approved mining plan. Hence there is no requirement of revised mine plan. The evidences are as followed: In compliance to <u>ToR Additional condition XVI</u>, details of mining technology/methodology have been described in the (chapter no 5, Page No. 5.1 – 5.32) of the approved mine plan with associated environmental benefits like, due to use of surface miner dust free coal face will be provided. In compliance to <u>TOR Additional condition XXII</u>, integrated mine plan with mine reclamation also provided in the mine plan (Page No. 9-10 of addendum to mining plan). As per waste management and selection of dump site ultimate height of the external dump will be +592m AMSL and the external dump will accommodate about 50.54 mcum of waste. The permanent internal dump (backfilling) will start from 5th year onwards and will continue till the life of the mine. It is proposed to backfill overburden on the entire property in the de-coaled area. Individual tiers of OB dumps would have maximum height of 30m at an angle of 37 degree. Overall slope angle of the OB dump would be about 27 degree. Maximum top level of internal dump will be +535m RL. The area which will be worked during the final year of mine operation will be backfilled upto +470m level from the floor of bottom most seam. This area will be utilized for water reservoir and the total area for water storage is 25 ha.
9	The PP shall submit the progressive reclamation plan of mine in time bound manner and approved Standard Operating Procedure for handing over the land to land allottees and Forest Department.  DEEPAK LENKA Unit Head Hindalco Industries Ltd. Chakla Coal Mines, Chandwa	Progressive Reclamation plan of mine in time bound manner is mentioned in the EIA/EMP report -Chapter no. 4, table no 4.28 (page no. 183) The same is reproduced below: Year Greenbelt Backfilling Non-mineralized (Temp. Dump Area) Total Area (In Ha) No of Plants

Area(In Ha)

No of Plants

Area(In Ha)

No of Plants

Area(In Ha)

No of Plants

1st - 5th

40.20

100500

-

-

-

-

40.20

100500

6th -10th

21.65

54125

101

161600

-

-

122.65

215725

11th - 15th

-

-

160.6

256960

20.00


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Chakla Coal Mines, Chandwa

32000

180.6

288960

16th – 20th

-

-

240

384000

94.75

151600

334.75

535600

Total

61.85

154625

501.6

802560

114.75

183600

678.2

1140785

Greenbelt/plantation plan- coal mine lease periphery in the first year

Location

Mtr.

Safety zone

Total Area in Mtr.

Ha.

Per Ha. no. of Plant

Total no. of Plants

Per Plant @ 100


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Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

		Coal Mine lease Periphery 12853 7.5 96397.5 9.63975 2500 24099 2891880 According to this Plan, greenbelt will be completed within initial 10 years. Plantation on safety zone will be completed within initial 5 years. Plantation on remaining area will be done as given in above plan. At conceptual stage, there will be approximately 11,40,785 trees on 678.20 ha area @ 1600 to 2500 plants per ha. Survival rate should be maintained 90%.
10	PP shall submit a detailed report on total carbon sink/absorption currently happening due to forest cover area and its loss after cutting of tress/forest and further, rate of carbon sequestration with progressive backfilling and plantation.	As per tree enumeration details at present, total 1,45,409 nos of trees belonging to different species are existing in the proposed Chakla Coal Mine. Due to mining activity in the core zone <i>Ficus benghalensis</i>, <i>Aegle marmelos</i>, <i>Acacia catechu</i>, <i>Tamarindus indica</i>, <i>Albizia lebbek</i>, <i>Butea monosperma</i>, <i>Mangifera indica</i> etc. species are likely to be cleared. Total Carbon Sequestration Potential is approximately 2,39,56,485 kg. The carbon sequestration per tree can be calculated as approximately 21 kg/year. At conceptual stage, total excavated area will be 526.6 ha; out of which 501.6 ha area will be reclaimed by backfilling and same will be rehabilitated by plantation with 1140785 nos of samplings belonging to different species. Greenbelt/ plantation will be carried out on 678.20 ha (Greenbelt along block boundary: 61.85 ha, Plantation on non-mineralized area: 114.75 ha, Plantation over backfilled area: 501.6 ha). The reduction in carbon sequestration due to proposed tree cutting of total 130000 nos of trees is estimated to be 27,30,000 kg/year by the end of (16th -20th year time period). The native plant species will be selected for greenbelt/plantation in consultation with the local Forest Officer. The species with rapid growth, ever green, large crown volume and small pendulous leaves with smooth surface/high rate of CO₂ absorption tree species will be selected. Comparison between Carbon Sequestration reduction (Kg/year) and Carbon Sequestration Potential (Kg/year) S. No. Year Proposed tree cutting plan Carbon sequestration reduction (Kg/year) Proposed Plantation Plan Carbon sequestration Potential (Kg/year)


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 Chakla Coal Mines, Chandwa

Net Carbon Gain (Kg/year)
1
1 st -5 th
20,000
4,20,000
1,00,500
2110500
16,90,500
2
6 th -10 th
30,000
6,30,000
2,15,725
4530225
39,00,225
3
11 th -15 th
32,000
6,72,000
2,88,960
6068160
53,96,160
4
16 th - 20 th
48,000
10,08,000
5,35,600
11247600
1,02,39,600


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 Chakla Coal Mines, Chandwa

		Total proposed tree cutting 1,30,000 27,30,000 11,40,785 2,39,56,485 2,12,26,485	
11	PP shall submit the detailed plan for implementation in form of CPM/PERT chart considering all eventuality involved for implementation of mechanized system.	PP has submitted the detailed plan for implementation in form of CPM/PERT chart.	

46.1.3 The committee during the EAC meeting noted the followings:

1. ToR granted to project vide letter no J-11015/1072/2007-IA.II (M) dated 11.10.2021.
2. Mine plan was approved by Ministry of Coal vide letter no. 13016/32/2007-CA-I dated 10.06.2008 in favour of M/s. Essar Power Ltd. Further it was transferred to M/s. Hindalco Industries Ltd.
3. Life of Mine is 20 years with proposed production capacity of 4.5 Million TPA.
4. No National Park, Reserved Forest, wildlife sanctuaries and Eco-sensitive zones located within 10 km boundary of the project.
5. NOC of Central Ground Water Authority vide NOC No. CGWA/NOC/MIN/ORIG/2022/ 15986 dated 14.07.2022 was obtained, which is valid up to 13.07.2024.
6. Previously, Public Hearing was conducted on 29.06.2009 for production capacity of 4.5 MTPA. However, PP could not obtain EC after appraisal and recommendation of EIA-EMP by the then EAC due to non-submission FC and subsequent deallocation.
7. The proposed budget for public hearing was submitted as Rs. 581.822 lakh and EMP budget is Rs. 1185.1 Lakh.
8. Baseline Monitoring has been carried for Summer Season (March to May 2021).
9. **Table 1: Proposed Physical targets for addressing issues of during Public Hearing**

S. No.	Physical Targets	Activity	Details of Activities	2023-24 (1 st Year)		EMP
				Target Population (Nos)	Proposed Budget	21 (2
						Target Populati (Nos)
1	Education (School Infrastructure)	Buildings and Civil structures (Renovation & Maintenance)	FY 2023-24 Buildings and Civil structures (Renovation & Maintenance) Chakla Middle School to convert as Model School with Kitchen Extension - 2.5 Lakhs Toilet Construction -	430	15.0	430

			3.5 Lakhs Fencing - 2 Lakhs Lunch Varandah - 7 Lakhs FY 2024-25 Repair of Ambatand and Nagar Primary School @Rs.2,60,000/- each. Construction New Primary School for Hariya Paduwa Village @Rs.21,00,000/- FY 2025-26 Repair of Nagar High School, the only High School of the Gram Panchayat @Rs.4,00,000/- each. Construction New Primary School for Arandiyatand Village @Rs.21,00,000/-			
2	Health Infrastructure	Special Project	Site specific intervention- Swacchta Sandesh with Sanitary Napkin Production Unit engaging SHG women	1000	70.0	1000
		Buildings and Civil structures (renovation and maintenance)	FY 2023-24 Developing Community Dispensary & Telemedicine Facility with free medicines throughout the year at Chakla Khas village FY 2024-25 Maintaining the Community Dispensary & Telemedicine Facility with free medicines throughout the year at Chakla Khas village FY 2025-26 Running & Maintenance of Community Dispensary &	4000	9.5	4000


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Granta Coal Mines, Chandwa

		Telemedicine Facility with free medicines throughout the year at Chakla Khas village			
	Drinking water new sources (Handpump/RO/Water Tank/well)	FY 2023-24 New installation of Deep Bore-well at least 2nos @Rs.2,20,000/- each Chakla, Ambatand Villages FY 2024-25 New installation of Deep Bore-well at least 2nos @Rs.2,20,000/- each Hariya Paduwa & Nawatoli Villages FY 2025-26 New installation of Deep Bore-well at least 3nos @Rs.2,20,000/- each Chakla & Arandiyatand Villages	600	4.400	600
	Drinking water existing sources (Operation/Maintenance)	FY 2023-24 Repair of Hand Pump at least 10 Nos @Rs.20000/- each) and 05 nos of Bore-well Repair @Rs.30,000/- each at Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages FY 2024-25 Repair of Hand Pump at least 10 Nos @Rs.20000/- each) and 05 nos of Bore-well Repair @Rs.30,000/- each at Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages FY 2025-26 Repair of Hand Pump at least 20 Nos @Rs.20000/- each) and 05 nos of Bore-well Repair @Rs.50,000/- each	850	3.5	850

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			Chakla. Hariya Paduwa. Arandiyatand, Ambatand & Nawatoli Villages			
3	Sustainable Livelihood Infrastructure	Natural Resource conservation programs & Non-conventional Energy				
		Water conservation and harvesting (small structures/ bigger structure)	Maintenance and beautification of new water bodies/grass patching and plantation on bunds	300	20.0	150
		Livelihood Infrastructure				
		Check Dams/Water sheds/Tree Plantation				
		Pond deepening work in Villages Chakla, Hariyatoli, Amwatan, Nawatoli & Ambuatannr		1000	50.0	200
		Watershed/Area treatment/Check Dam/Gabion structure		400	20.0	400
		Tree Transplant/Tree Plantation		500	25.0	500
4	Rural Infrastructure Development other than for the purpose of Health /Education /Livelihood	New Roads/Culverts/Bridges/Bus Stands	FY 2023-24 02 nos of CC Road covering total 1KM at Chakla and Hariya Paduwa with approx @Rs.8,50,000/- each FY 2024-25 02 nos of WBM (Water Bound macadam) covering total 2KM at Arandiyatand & Ambatand with approx @Rs.6,58,000/- each FY 2025-26 02 nos of WBM Road at Ambatand & Nawatoli with approx @Rs.8,50,000/- each	2000	17.0	1500
			FY 2023-24 02 nos of CC Road covering total 1KM at Chakla and Hariya Paduwa with approx @Rs.8,50,000/- each FY 2024-25 Road repair at Chakla village with approx @Rs.3,00,000/- FY 2025-26 1 no of Murrum Road with approx @Rs.3,00,000/- at Chakla			
		Repair Roads/Culverts/Bridges/Bus Stands		4000	3.0	4000
		Community Halls	FY 2023-24 1 Community Hall at	2500	15.0	1000

Chakla Coal Mines, Chandwa

			Chakla @Rs.15,00,000/-) FY 2024-25 1 no of Women SHG Training Hall @Rs.16,00,000/- at Chakla Repair of Chakla Youth Club @Rs.4,00,000/- FY 2025-26 1 Community Hall at Ambatand @Rs.15,00,000/-) 1 Women SHG Training Hall at Ambatand @Rs.16,00,000/-			
		Other Community Assets	FY 2023-24 New Dug Well @Rs.200000/- *5=10,00,000/- with Washing Platform and Soakpit at Chakla & Ambatand Villages FY 2024-25 New Dug Well @Rs.200000/- *5=10,00,000/- with Washing Platform and Soakpit at Nawatoli and Bhukutola Villages FY 2025-26 Dug Well @Rs.200000/- *10=20,00,000/- with Washing Platform and Soakpit at Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages	1500	10.0	1500
SUB TOTAL (A)				19080	262.4	16130

Other Proposed Activities

S. No.	Physical Targets	Activity	Details of Activities	2023-24 (1 st Year)		21 (2)
				Target Population (Nos)	Program Spending (Rs. In Lakh)	Target Populati (Nos)
1	Pre-school education	Strengthening Anganwadi Centre-Govt. supported	FY 2023-24 04 nos of Anganwadi at Chakla Khas, Ambatand, Nawatoli	110	2.4	0

			and Arandiyatand - Infrastructure renovation and Educational Paintings @Rs.60,000/- each FY 2025-26 04 nos of Anganwadi at Chakla Khas, Ambatand, Nawatoli and Arandiyatand - Education and sports stationaries @Rs.60,000/- each			
2	School Education Program	Enrollment awareness programmes / events	Awareness campaign through Nukkad Natak and door to door campaign at Chakla Khas, Ambatand, Nawatoli, Arandiyatand @Rs.50,000/- each	0	0.0	0
		Scholarship (Merit and Need based assistance)	FY 2023-24 & 2024-25 To help at least 30 Girls students from Chakla Middle School and Chakla High School for Higher studies @Rs.10,000/- each FY 2025-26 To help at least 30 Girls students from Chakla Middle School and Chakla High School for Higher studies @Rs.20,000/- each	30	3.0	30
		School competitions /Best teacher award	FY 2023-24 & 2024-25 01 Mega Inter-school sports Competition programs Including all the primary, Middle and High Schools of Chakla GP @Rs.1,00,000/- FY 2025-26 01 Mega Inter-school sports Competition programs Including all the primary, Middle and High Schools of Chakla	750	1.0	750

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			GP @ Rs.1,50,000/-			
		Quality of Education (support teachers, Improve education methods,)	FY 2023-24 Establishing Mini Science Lab at Chakla Middle school @Rs.2,50,000/- and High School @Rs.4,50,000/- FY 2024-25 & 2025-26 Maintenance of Mini Science Lab at Chakla Middle school and High School @Rs.75,000/- PA	400	7.0	400
3	Education support programs	Adult and non-formal education	FY 2023-24 & 24-25 Total 8 nos of Free Coaching Centres for Primary students at Chakla Khas 4, Ambatand 1, Nawatoli 1, Arandiyatand 1 & Hariya Paduwa 1 with Monthly Parents Teachers Meeting @Rs.40,000/- each FY 2025-26 Total 8 nos of Free Coaching Centres for Primary students at Chakla Khas 4, Ambatand 1, Nawatoli 1, Arandiyatand 1 & Hariya Paduwa 1 with Monthly Parents Teachers Meeting @Rs.25,000/- each	250	4.8	250
		Celebration of National days / International days	At all the 5 Primary, 1 Middle and 1 High School of Chakla GP @Rs.30,000/- each	950	1.5	950
		Computer education	FY 2023-24 & 24-25 Computer Coaching Centre at Chakla Khas & Nawatoli @Rs.2,00,000/- each FY 2025-26 Computer Coaching Centre at Chakla Khas & Ambatand @Rs.2,50,000/- each	100	4.0	100

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Hindalco Industries Ltd.

Chakla Coal Mines, Chandwa

4	Health (Preventive Health Care)	Immunization	04 Camps per year @Rs.20,000/- per camp at Chakla Khas, Ambatand, Arandiyatand, Hariya Paduwa	240	0.8	240
		Pulse polio immunization	Logistic support to CHC Chandwa for Polio Iradication Drive Once in a year	2500	0.2	2500
		Health & Hygiene awareness programmes	FY 2023-24 & 24- 25 At least 5 session @ 15,000/- each at Chakla Khas, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli FY 2025-26 At least 5 session @ 18,000/- each at Chakla Khas, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli	500	0.8	500
5	Curative Health Care program	General Health camps	MHU running 5 Days a wekk covering every tolas of Chakla Khas, Hariya Paduwa, Arandiyatand, Ambatand, Nawatoli, Nagar & Sadabah and conducting Village Health Camps with medicines @Rs.1,50,000/- PM * 12 months	5000	18.0	5000
		Specialized Health Camps	04 Specialized Health Camps covering Ortho, Peeiatrics, Gynee, Skin, ENT, etc.@ Rs.45,000/- each at Chakla Khas being the center point for all the villages.	1200	1.8	1200
		Eye camps	Catract Identification Camp @Rs.80,000/- once in a year at Chakla Khas being the center point for all the villages. This is followed by operation and	150	0.8	150

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			spectacles distribution. each with Specs			
		Tuberculosis	FY 2023-24 & 24-25 02 Camps @Rs.15,000/- each at Chakla and Ambatand FY 2025-26 02 Camps @Rs.30,000/- each at Chakla and Ambatand	100	0.3	100
6	Reproductive and Child Health	Adolescent Health care (for Girls)	FY 2023-24 & 24-25 On Project mode drive digitally, supply of nutritious food and medicine to approx 200 Adolescent Girls @Rs.125/- *400 Girls *12 months = 3,00,000/- Volunteers Fees @Rs.2000*12 Months=24000/- FY 2025-26 On Project mode drive digitally, supply of nutritious food and medicine to approx 400 Adolescent Girls @Rs.125/- *400 Girls *12 months = 6,00,000/-	200	3.2	200
		Infant and child health (Healthy baby completion)	FY 2023-24 & 24-25 Tonics, Medicines and Food suppliments to the Babies of Hariya Paduwa, Chakla, Ambatand @Rs.166.66/- per baby*12 Months *150 Babies up to 2 years of age=300000/- FY 2025-26 02 nos of Healthy Baby Show at Chakla @Rs.60,000/- each Tonics, Medicines and Food suppliments to the	150	3.0	150

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Chakla Coal Mines, Chakla

			Babies of Hariya Paduwa. Chakla, Ambatand @Rs.130/- per baby*12 Months *300 Babies up to 2 years of age			
		Nutritional programmes for mother/child	FY 2023-24 & 24-25 In Chakla, Hariya Paduwa. Ambatand villages - On Project mode Mother and Child Health care combined with Nutritional Program drive digitally record keeping in the GP, supply of nutritious food and medicine to approx 200 mothers (either expecting/with baby upto 1 year) * 125/- pm each* 12 months = 3,00,000/- FY 2025-26 In Chakla, Hariya Paduwa, Ambatand villages - On Project mode Mother and Child Health care combined with Nutritional Program drive digitally record keeping in the GP, supply of nutritious food and medicine to approx 250 mothers (either expecting/with baby upto 1 year) * 150/- pm each* 12 months = 4,50,000/- + voulentier appreciation in kind @ 2000/- * 05 voulenteer *12 months = 1,20,000/- + Program Overhead cost Rs.30,000/-	200	3.0	200
7	Quality / Support Program	Referral services	This is to cater for emergency referral cases as and when require in Chakla, Hariya Paduwa, Arandiyatand,	30	5.0	30

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Unit Head

			Ambatand & Nawatoli Villages			
		Treatment of BPL, old age or needy patient	This is to cater for special treatment of BPL, Oldage and Needy patients as and when require in Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages	0	0.0	0
		Support for differently abled	This is to cater for aparatus, calipers, wheelchairs etc. etc for Differently Abled people to support as and when require in Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages	10	2.0	0
		Blood donation camps	01 camp @Rs.30,000/- centrally at Chakla Village	100	0.3	100
		Others	To provide 2 ANM @Rs.15000/- each*12 months*2 = 3,60,000/- for Govt. Health Sub Centers at Chakla and Nagar	8000	3.6	8000
8	Sustainable Livelihood	Agriculture & Horticulture training programme/ Farmers group	FY 2023-24 25 on field Training programs on Agriculture/ Horticulture with demo plot @Rs.34,000/- each at Chakla, Ambatand & Nawatoli FY 2024-25 25 on field Training programs on Agriculture/ Horticulture with demo plot @Rs.34,000/- each at Chakla, Ambatand & Nawatoli FY 2025-26 25 on field Training programs on Agriculture/ Horticulture with demo plot @Rs.34,000/- each	150	8.5	150

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Hindalco Industries Ltd.

Chakla Coal Mines, Chandwa

			at Chakla, Arandiyatand, Ambatand & Nawatoli			
		Transfer of Technology- Demonstration plots	One Lab on 2 acres with Nursery creation on our own acquired Land at Chakla	300	8.0	300
		Support for horticulture plots	5 nos of programs with demo @ Rs.50,000/- each at Chakla, Arandiyatand, Ambatand & Nawatoli	0	0.0	0
		Seeds Improvement Program	05 nos of programs with seed distribution and demo agriculture @ Rs.50,000/- each at Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages	100	2.5	100
		Support for improved agriculture equipment and inputs	To support 50 Farmers with Agricultural Inputs @Rs.10,000/- each of Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages	1600	5.0	1600
		Soil health and organic farming	Nutritional home garden in covering 200 household @Rs.3,000/- each	800	6.0	800
		Farm Based IGP	Promotion of Farm based Livelihood Azolla farming/ Vermi compost unit/Mushroom	100	2.0	100
		Farm Based IGP	Promotion of Off Farm based - Duck rearing/ Poultry Unit/Bee Keeping	100	3.0	100
9	Animal Husbandry Based	Treatment and vaccination	To cover at least 500 cattle of Chakla GP @ Rs.70,000/-	500	0.7	500
		Non-farm & Skills Based Income Generation Program				
		Capacity Building Program- Tailoring, Beauty Parlour, Mechanical	Capacity Building programme- Tailoring Training fee 5500+Room Rent	110	7.8	110

			1800+ Materials 1000 + Misc 500 *5 Centre * 12 Months) = Rs.5,28,000/- Pico and Other Machines Rs.250000/- at Chakla, Ambatand, Navatoli villages			
		Rural Enterprise development & Income Generation Programmes	Sewing Machines for 50 women @Rs.7000/- each	50	3.5	50
		Support to SHGs for entrepreneurial activities	To support 10 SHGs with Rs.30,000/- each of Hariya Paduwa village	0	0.0	0
		Non-farm Based IGP	Promotion of Non- Farm based Livelihood-Cocoon Reeling/Advance stitching/others	200	15.0	200
10	Natural Resource conservation programs & Non- conventional Energy	Solar energy support and	FY 2023-24 & 24-25 To provide Solar Street Light @Rs.35000/- each*25=8,75,000/- at Chakla & Hariya Paduwa Village FY 2025-26 To provide Solar Street Light @Rs.35000/- each*50=17,50,000/- at Arandiyatand Village	1200	8.8	1200
		Plantation / Green Belt Development / Roadside Plantation	To distribute 1200 fruit bearing saplings * Rs.50/- each= 60,000/- + program cost 10,000	0	0.0	0
		Green Belt for Environment Protection	Nursery Development work to maintain Biodiversity and Plantation in Villages Chakla, Hariyatoli, Amwatan, Nawatoli and Ambuatandr (5000 Sapling in each Village)	500	50.0	200
12	Institutional building & strengthening	Strengthening / formation of community based organization (SHGs)	Strengthening 40 nos of SHGs by imparting various Book Keeping Training and Conducting	400	0.8	400

		Competitions activities @ Rs.2,000/- each SHG * 40 = Rs.80,000/-			
	Others	Women's Day Celebration at Chakla	500	1.5	500
	Social Security				
	Support to old age/ Widow/ physically challenged person / poor	Support to Oldage and widows' people of Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages	0	0.0	0
	Awareness programmes				
	Community awareness program	03 Awareness program on Disaster Preparedness/ WitchCraft/ Blind Belief/ Road Safety etc. etc.@Rs.30,000/- each with the people of Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages	300	0.9	300
	Social Events to minimize causes of poverty				
	National/International day celebrations with community	26 th January and 15 th August National Days Celebration 02 program @Rs.50,000/- each with the people of Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages	500	1.0	500
	Support with basic necessities (Blankets)	Blanket distribution to 2000 Senior Citizens of Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages @Rs.250/- each	2000	5.0	2000
	Promotion of heritage/culture/Sports				
	Support to rural cultural programme, Festivals & Fairs	Support to Rural Culture including Sarhul, Adivasi Diwas & Karma at Chakla, Hariya Paduwa, Arandiyatand,	4000	8.1	4000

		Ambatand & Nawatoli Villages			
	Support to Rural Sports program	To support to 04 nos of Mega Sports Tournaments of Football/Cricket and Tribal Sports at Chakla, Hariya Paduwa, Arandiyatand, Ambatand & Nawatoli Villages @Rs.1.75,000/-	2000	7.0	2000
13	Salary and Overheads	Salary & Overhead Voulenteer @Rs.8000/-PM * 12 Months * 4 persons = Rs.3,84,000/-	4	3.8	4
SUB TOTAL (B)			36384	215.4	35964
GRAND TOTAL (A+B)				477.7	

3.2.3. Deliberations by the EAC in previous meetings

Date of EAC 1 :24/04/2023


DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.

Deliberations of EAC 1 :

The EAC, after detailed deliberations observed that the instant proposal is a Greenfield project. The project was earlier considered and recommended by EAC in the year 2010 prior to order of Hon'ble Supreme Court wherein all coal blocks were cancelled. Since the Public Hearing (PH) was already conducted by prior allottee, and presently public hearing is exempted while grating ToR for this instant proposal but with issue of public notices to incorporate the any concerns of public. As per submissions of PP, EAC observed that no comments or feedback has been received after public notice by JSPCB for this project.

Also, references are gathered from the past appraisal of this project wherein the said coal blocks were identified as No-Go Areas, however current status of the area is unavailable to the committee. It was observed that the peak production of coal mine is 4.5 MTPA involving total 503.578 ha of forest land involved for diversion, however forest clearance is presently under process at State level for Stage-I FC. Recognizing the fact that mine plan was prepared prior to Supreme court judgement dated 6th July, 2011 in WP No.202 of 1995 in the matter of T.N.Godavarman Thirumulpad Vs Union of India & others wherein order passed in cases where environmental clearance is required for a project on forest land, the forest clearance shall be obtained before the grant of the environment clearance..... These guidelines are required to be given so that fait accompli situations do not recur... However, in the matter, it was realized that the project proponent has to submit the certificate from the District Magistrate/Collector for verification of the forest land involved under Forest Right Act, 2006, which will ensure the total coverage of forest land available for diversion that fall under the mine plan of 2008. Besides, the project proponent shall also submit authenticated reserves available below the forest area.

The Committee found that the protection measures for tributary no. 6 of Mahalania Nallah did not cover in the EIA Report as the ToR specific condition no. (iii), therefore it was advised to prepare protection plan showing impact on Ecosystem/Environment. The protection plan for stream to be prepared in such a way so that it will save the stream from dumping of Overburden and same plan to be incorporated in the Mining plan.

During the discussion, committee also found that the PP did not fulfill another important specific condition no. (xiii) i.e. "PP shall prepare a Damage assessment (likely due to mining activity) i.e. augmentation report on Natural resources including the carrying capacity of river and stream passing by with its catchment area, its mitigation measures". The report "Assessment Study for Diversion Of Nallah" submitted in compliance of ToR specific conditions did not cover the impact of diversion on the catchment area and Environment. The report concludes that the water from diverted channels to seep towards existing channels due to surface geology.

Further, study has been done based on theoretical data based on precipitation for last 50 and 100 years and no validated assessment of quantity with flowrate of water in the stream has been assessed. The likely impact should include on flowrate, volume of water being diverted and any whether there in major impact on habitation living there. Therefore, the committee opined that the project proponent to emphasis on proper estimation of impact and revisit the specific condition no. (iii), (iv) and (xiii) for submission of study which will cover the concerns of seepage from diverted channel to existing as well as impact of diversion on the Ecosystem/Environment and the protection of tributary no. 6 of Mahalania Nallah.

With regard to transportation of coal from the mine through inpit conveyor system with silo loading system till railway siding has been committed to implement within 3 years of mine operation. No trucks will be passing through village road. Also PP has committed not to divert any forest land for any infrastructure or OB dump since all the forest land is coal bearing area. Also, committed to change the sequence of dumping of OB proposed near Chakla village i.e. moving away from village while dumping OB from the first year. The OB dumping shall be 200 mts away from the village and dense plantation with 8 ft to 10 ft trees shall be planted. As per ToR(vi), PP was to amend/revise the Mine Plan as per discussion held during Terms of References, However, PP has not submitted the Mine plan covering all conditions of TOR.

In view of the above, committee opined that the project proponent shall submit the above mentioned course of action: -

1. Project Proponent to rework on proper estimation of impact due to diversion and revisit the specific condition no. (iii), (iv) and (xiii) for submission of study which will cover the concerns of seepage from diverted channel to existing as well as impact of diversion on the Ecosystem/Environment and the protection of tributary no. 6 of Mahalania Nallah. The study shall be redone accordingly.
2. PP needs to submit certificate from the District Magistrate for verifying the existence of forest land covered under the Forest Right Act, 2006 and consequential forest land shall be required for diversion.
3. PP needs to clarify from the documents of State Government that the area does not fall under No-Go Area category/zone.
4. PP shall submit Letter of Intent in the name of PP from State Government regarding proposed mine lease area

DEEPAK LENKA
Unit Head

5. PP needs to submit the coal reserves available below the forest land lying inside the Mine lease area.
6. PP needs to submit the protection plan for villagers lying inside the mine lease area from the mining activities during overlapping period of mining and rehabilitation.
7. PP needs to submit the coal evacuation plan considering the route should not pass through village area for the initial 3 years i.e. till implementation of railway siding.
8. PP needs to revisit and conform that current mine plan is in compliance to discussion held during Terms of References i.e. as per ToR(vi) covering all items prescribed in TOR. Therefore, PP shall submit the Mine Plan and Mine Closure Plan as per observation of EAC and latest guidelines of Ministry of Coal.
9. The PP shall submit the progressive reclamation plan of mine in time bound manner and approved Standard Operating Procedure for handing over the land to land allottees and Forest Department.
10. PP shall submit a detailed report on total carbon sink/absorption currently happening due to forest cover area and its loss after cutting of tress/forest and further, rate of carbon sequestration with progressive backfilling and plantation.
11. PP shall submit the detailed plan for implementation in form of CPM/PERT chart considering all eventuality involved for implementation of mechanized system.

*In view of the above, the project was **deferred** for submission of observation.*

Date of EAC 2 :24/04/2023


DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

Deliberations of EAC 2 :

The EAC, after detailed deliberations observed that the instant proposal is a Greenfield project. The project was earlier considered and recommended by EAC in the year 2010 prior to order of Hon'ble Supreme Court wherein all coal blocks were cancelled. Since the Public Hearing (PH) was already conducted by prior allottee, and presently public hearing is exempted while granting ToR for this instant proposal but with issue of public notices to incorporate the any concerns of public. As per submissions of PP, EAC observed that no comments or feedback has been received after public notice by JSPCB for this project.

Also, references are gathered from the past appraisal of this project wherein the said coal blocks were identified as No-Go Areas, however current status of the area is unavailable to the committee. It was observed that the peak production of coal mine is 4.5 MTPA involving total 503.578 ha of forest land involved for diversion, however forest clearance is presently under process at State level for Stage-I FC. Recognizing the fact that mine plan was prepared prior to Supreme court judgement dated 6th July, 2011 in WP No.202 of 1995 in the matter of T.N.Godavarman Thirumulpad Vs Union of India & others wherein order passed in cases where environmental clearance is required for a project on forest land, the forest clearance shall be obtained before the grant of the environment clearance.....These guidelines are required to be given so that fait accompli situations do not recur...' However, in the matter, it was realized that the project proponent has to submit the certificate from the District Magistrate/Collector for verification of the forest land involved under Forest Right Act, 2006, which will ensure the total coverage of forest land available for diversion that fall under the mine plan of 2008. Besides, the project proponent shall also submit authenticated reserves available below the forest area.

The Committee found that the protection measures for tributary no. 6 of Mahalanallah did not cover in the EIA Report as the ToR specific condition no. (iii), therefore it was advised to prepare protection plan showing impact on Ecosystem/Environment. The protection plan for stream to be prepared in such a way so that it will save the stream from dumping of Overburden and same plan to be incorporated in the Mining plan.

During the discussion, committee also found that the PP did not fulfill another important specific condition no. (xiii) i.e. "PP shall prepare a Damage assessment (likely due to mining activity) i.e. augmentation report on Natural resources including the carrying capacity of river and stream passing by with its catchment area, its mitigation measures". The report "Assessment Study for Diversion Of Nallah" submitted in compliance of ToR specific conditions did not cover the impact of diversion on the catchment area and Environment. The report concludes that the water from diverted channels to seep towards existing channels due to surface geology.

Further, study has been done based on theoretical data based on precipitation for last 50 and 100 years and no validated assessment of quantity with flowrate of water in the stream has been assessed. The likely impact should include on flowrate, volume of water being diverted and any whether there in major impact on habitation living there. Therefore, the committee opined that the project proponent to emphasis on proper estimation of impact and revisit the specific condition no. (iii), (iv) and (xiii) for submission of study which will cover the concerns of seepage from diverted channel to existing as well as impact of diversion on the Ecosystem/Environment and the protection of tributary no. 6 of Mahalanallah.

With regard to transportation of coal from the mine through inpit conveyor system with silo loading system till railway siding has been committed to implement within 3 years of mine operation. No trucks will be passing through village road. Also PP has committed not to divert any forest land for any infrastructure or OB dump since all the forest land is coal bearing area. Also, committed to change the sequence of dumping of OB proposed near Chakla village i.e. moving away from village while dumping OB from the first year. The OB dumping shall be 200 mts away from the village and dense plantation with 8 ft to 10 ft trees shall be planted. As per ToR(vi), PP was to amend/revise the Mine Plan as per discussion held during Terms of References, However, PP has not submitted the Mine plan covering all conditions of TOR.

In view of the above, committee opined that the project proponent shall submit the above mentioned course of action: -

1. Project Proponent to rework on proper estimation of impact due to diversion and revisit the specific condition no. (iii), (iv) and (xiii) for submission of study which will cover the concerns of seepage from diverted channel to existing as well as impact of diversion on the Ecosystem/Environment and the protection of tributary no. 6 of Mahalanallah. The study shall be redone accordingly.
2. PP needs to submit certificate from the District Magistrate for verifying the existence of forest land covered under the Forest Right Act, 2006 and consequential forest land shall be required for diversion.
3. PP needs to clarify from the documents of State Government that the area does not fall under No-Go Area category/zone.
4. PP shall submit Letter of Intent in the name of PP from State Government regarding proposed mine lease area

DEEPAK LENKA
Unit Head

5. PP needs to submit the coal reserves available below the forest land lying inside the Mine lease area.
6. PP needs to submit the protection plan for villagers lying inside the mine lease area from the mining activities during overlapping period of mining and rehabilitation.
7. PP needs to submit the coal evacuation plan considering the route should not pass through village area for the initial 3 years i.e. till implementation of railway siding.
8. PP needs to revisit and conform that current mine plan is in compliance to discussion held during Terms of References i.e. a per ToR(vi) covering all items prescribed in TOR. Therefore, PP shall submit the Mine Plan and Mine Closure Plan as per observation of EAC and latest guidelines of Ministry of Coal.
9. The PP shall submit the progressive reclamation plan of mine in time bound manner and approved Standard Operating Procedure for handing over the land to land allottees and Forest Department.
10. PP shall submit a detailed report on total carbon sink/absorption currently happening due to forest cover area and its loss after cutting of tress/forest and further, rate of carbon sequestration with progressive backfilling and plantation.
11. PP shall submit the detailed plan for implementation in form of CPM/PERT chart considering all eventuality involved for implementation of mechanized system.

In view of the above, the project was **deferred** for submission of observation.

3.2.4. Deliberations by the EAC in current meetings

The EAC after deliberation observed that the instant proposal is Greenfield coal mine project. The project was earlier considered and deferred by EAC with certain observations. The PP has submitted the detailed replies on PARIVESH portal. The committee during discussion observed proposed budget of Rs. 581.822 lakhs against Public Hearing and Rs. 1185.1 lakhs as EMP cost. The Committee advised PP to have regular annual audit on the proposed budget and submit the report to IRO, MoEF&CC.

The committee raised concerns on protection of Chakla village after diversion of Mahalanah Nallah. On enquiry about safety measures to be adopted on diversion of Mahalanah Nallah, PP informed that adequate embankment height shall be maintained on both side of stream with sufficient free board upto 3 mts. PP informed that all care shall be taken for smooth discharge of water before its disposal to other channel at downstream along with tree plantation. Further in order to avoid chances of submergence during construction in monsoon, PP agreed to divert stream in one go i.e. majority of works during post Monsoon season and extra protection measures shall be made like lining, sedimentation pond and closure bunds. EAC emphasized that project proponent shall not divert the tributary no. 6 of Mahalanah nallah located towards south, adequate protection measures needs to be taken to protect this stream. If required, mine plan shall be amended at later stage based on above stipulation prescribed by EAC. Finally, EAC advised for adequate protection measures to be adopted by PP on diversion of stream and same shall be reported to IRO, MoEF&CC with complete report including the drone video.

Further, PP informed that it has already obtained approval of Chief Engineer (Water Resource Department) for diversion of Mahalanah nallah based on hydrogeological study conducted by WAPCOS. The recommendation of the same shall be strictly complied within certain timeline as the mine operations progresses.

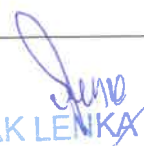
Based on the above, EAC **recommended** the proposal for grant of Environmental Clearance for Chakla Opencast Coal Block Mine (North Karanpura Coalfield) with production capacity of 4.5 MTPA in ML area 863 ha of M/s Hindalco Industries Limited located at villages Chakla, Hariyatoli, Nawatoli, Amwatanr and Ambwatanr, Tehsil Chandwa, District Latehar (Jharkhand), under EIA Notification, 2006 and its amendments therein with following additional specific conditions to be followed:

3.2.5. Recommendation of EAC

Recommended

3.2.6. Details of Environment Conditions

3.2.6.1. Specific


DEEPAK LENKA
 Unit Head
 Hindalco Industries Ltd.
 Chakla Coal Mines, Chandwa

Specific Condition - Forest	
1.	1.PP shall submit Stage-I Forest Clearance for the forest land area (503.578 ha) involved in the mine lease area prior to grant of Environment Clearance.
2.	2.PP shall obtain CTE/CTO from State Pollution Control Board for 4.5 MTPA production capacity for open cast operation.
3.	3.PP shall divert the Mahalania Nallah in a manner that its construction for diversion shall be covered in one go without extended period and works plan shall be designed to complete the diversion avoiding Monsoon season (i.e effective working months of non-monsoon season). Embankment height shall be maintained on both side of stream with sufficient free board upto 3 mts from its HFL.
4.	4.PP shall maintain 50 mts width of embankment all along the diverted stream/nallah (Mahalania) and conduct dense plantation with fruit bearing native species by itself.
5.	5.The diversion of Mahalania Nallah shall be monitored by IRO and complete report with the drone video and satellite imagery shall be submitted to IRO, MoEF&CC.
6.	6.PP shall install dedicated inpit conveyor belt with silo loading system till railway siding for transportation of 90% of extracted coal through rail and only 10% by road within three years (i.e. March, 2026). Accordingly, SPCB should grant the consent to operate.
7.	7.PP shall deploy the truck size of upto 40 tonnes (payload) for transportation of coal by road. Transportation of coal shall be done in covered trucks only till March, 2026.
8.	8.As proposed dedicated concrete Road of ~2km length and 12 mt width, away from the villages and sensitive location like school and hospitals shall be constructed to transport the coal prior to the start of the mining operation. Further 10 mts width of tree plantation shall be conducted to mitigate the vehicular and dust emission on both side of road.
9.	9.The PP shall not divert the Nagarnadiya Nadi S1, Tributary S2, Tributary S4, tributary no. 6 of Mahalanianallah located towards south.
10.	10.The mining plan shall be revised/amended at later stage after incorporating the diversion of Nallah in one go with year-wise coal production.
11.	11. PP shall implement activities-wise proposed budget of Rs. 581.822 lakhs (as Public Hearing Budget), Rs. 1185.1 lakhs (as EMP cost) in time bound manner as in Table 1 in above para of MoM 46.1.3. The details of annual expenditure shall be part of report submitted to IRO, MoEF&CC. PP needs to include the audited figures against the expenditure and activities to be monitored by through dedicated online monitoring mechanism. The maintenance of all activities shall be covered through recurring cost of Public Hearing, which will be part of CSR budget.
12.	12.PP needs to carry out the regular desilting operation in order to maintain continuous flow of water in diverted channel including the point "G" of the proposed channel segment before discharging into tributary of Damodar River.
13.	13.PP shall monitor regularly water levels in open dug wells located in village and by establishing Piezometer to ascertain the impact of mining over ground water table and to plan mitigative measures to recharge the area.
14.	14.Main haul road in the mine shall be provided with permanent water sprinklers, and other roads shall be regularly wetted with water tankers fitted with sprinklers. Also PP shall install Mist Cannon Dust Suppression Systems (80-100 mtrs.) at Coal Stock Yard to suppress the dust particles.
15.	15.Garland drains (2mX3m) of adequate size shall be provided at the toe of the benches to arrest discharge and runoff with silt and sediments surging into areas adjoining the periphery of Overburden dump, which will be

	<i>regularly cleaned before the onset of monsoon every year.</i>
16.	<i>16. Check dams shall be constructed at required locations within drains to arrest eroded materials and settling ponds shall be constructed to treat mine discharge water inside the mine block.</i>
17.	<i>17. As proposed 5 water harvesting pond shall be created separately to recharging the ground water and usage of project affected families.</i>
18.	<i>18. Proper profiling of working benches of pits and dumps shall be done to channelize water in garland drains & sumps.</i>
19.	<i>19. Waste generated from the domestic use shall be treated in STP and the treated water will be utilized in plantation & greenbelt development. Wastewater from the HEMM washing/ workshop will be treated in ETP. After treatment, water will be reused in washing of HEMM, dust suppression and greenbelt development.</i>
20.	<i>20. Dumping of OB shall move away from Chakla village and distance of about 200 mts shall be kept and additional Greenbelt development/plantation (atleast 8 to 10 ft trees) shall be carried out at the periphery of the mine lease area as well as in the adjacent area Chakla village.</i>
21.	<i>21. PP shall limit the activities of mining in its mine lease area only. No OB Dumping and infrastructure activity should be proposed and dumped on forest land. Accordingly revised Mine Plan should be submitted (if required) and submitted to Ministry.</i>
22.	<i>22. PP shall make use of advanced computer simulation techniques for design and execution of blasting operation in the mine. PP shall make use of Electronic Delay Detonators for optimal blasting in coal and OB rock to minimize the environmental impacts of blasting such as ground vibration, fly rocks and excessive dust generation.</i>
23.	<i>23. PP shall deploy atleast 20% of overall fleet of dumpers/trucks as electrical or CNG/LNG based dumpers/trucks for transportation of coal/OB etc</i>
24.	<i>24. All the recommendation of hydrogeology study conducted by WAPCOS shall be complied during the mining operation and status shall be submitted to Ministry's IRO.</i>
25.	<i>25. As proposed during the meeting, PP shall reduce the carbon footprint after sequestration of CO₂ and 16,90,500 Kg/year, 39,00,225 Kg/year, 53,96,160 Kg/year and 1,02,39,600 Kg/year of CO₂ to be sequestered in the 5th, 10th, 15th & 20th year of mining respectively. IRO will review the progress of CO₂ sequestration. The process of sequestration of CO₂ will include the planting trees, by "Developing carbon capture and storage (CCS) technologies" and implementation of renewable energy. Further, PP shall carry out enough plantation to ensure carbon sequestration lost due to deforestation and other fossil fuel based activities.</i>
26.	<i>26. PP shall create a "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to IRO within 3 months. A logbook to be maintained by PP on "Public Grievance Redressal and Monitoring System.</i>
27.	<i>27. PP shall ensure distribution of water from the artificial reservoir within and outside Mine lease area in consultation with gram panchayat. The water treatment plant to meet the requirement with the start of production.</i>
28.	<i>28. PP shall install fixed fog cannon (mist spayer) and fixed sprinkler all along the haul road/ CHP, and OB dump till Railway siding is completed. The sufficient number of fog cannons (not less than 10 nos.) with 40 mts jet length shall be installed within 6 months. It should be ensured that air pollution level confirm to the standards prescribed by the MOEFCC/CPCB.</i>
29.	<i>29. PP shall deposit the approved amount as proposed for wildlife conservation plan to the Govt. of Jharkhand Forest & Environment Dept. and further consult with State Biodiversity Authority for its CSR activity.</i>

30.	30.PP shall construct new multispecialty (50 beds) hospital in the 10 km of the project area within 5 years for local people out of approved budget. The project affected families shall be given free medical facility. This shall be done in consultation of DM of the district.
31.	31.PP shall conduct third party audit of compliance of EC condition at an interval six months and its report shall be submitted to IRO, MoEF&CC.
32.	32.The status of mine closure activities must be included in every six months compliance report submitted to the state pollution control board and IRO.
33.	33.PP to maintain the topped haul road properly to minimized the dust emission. PP to also develop pucca roads by seeking consent from the panchayat with widening of roads especially roads inter linking the villages within the study area of 10 km radius buffer zone.
34.	34.PP to install solar lights along the road used for transportation of minerals to avoid the accidents at night and also seek its maintenance. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone within one year.
35.	35.PP to provide bio toilets to the villages located within the study areas within 1 year from the grant of this EC.
36.	36.Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.
37.	37.PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extent rules or norms
38.	38.PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority.
39.	39.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 MoEF&CC.
40.	40.PP shall conduct feasibility studies for assessment of voids for backfilling of ash and mixing of ash with overburden, taking up backfilling ash and OB mixing activities during operations as well as post closure of mines in line with the Fly Ash Utilization Notification, 2021.

3.2.6.2. Standard

1(a)	Mining of minerals
Statutory compliance	
1.	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.
2.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

3.	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).
4.	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 prior to start/commencement of mining operations/production
5.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority
6.	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.
7.	Permission of power supply to be taken from the concerned authority for meeting power demand of the project site.
8.	The maximum production or peak production at any given time shall not exceed the limit as prescribed in the EC.

Air quality monitoring and mitigation measure

1.	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.
2.	Transportation of coal, to the extent, if permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun/ Fog cannon etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM2.5) 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.
3.	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.
4.	PP to install solar lights along the road used for transportation of coal to avoid the accidents at night and also seek its maintenance.
5.	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.
6.	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.
7.	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.
8.	Adequate measures on EMP should be analyzed on annual basis to assess the trend 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.
9.	Effective safeguard measures for prevention of dust generation and subsequent suppression like regular water sprinkling shall be carried out in areas prone to air pollution. The Fugitive dust emission from all sources shall be regularly controlled by installation of required equipment's. It should be ensured that air pollution level confirm to the standards prescribed by the MOEFCC/CPCB
10.	Adequate number of Fog canon (mist sprayer) shall be installed to reduce the impact of air pollution at dust generating sources with time bound action plan.
11.	PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.
12.	Post environmental closure third party monitoring by reputed instituted in air quality, water, land & soil etc shall be carried out and analysed with EMP measures at regular interval. A suitable recommendation in this regard, shall be furnished to IRO, MoEF&CC for compliance. The data used for analysis shall be obtained from continuous AQMS, site specific water regime. Also third party shall analyses the implementation of river diversion, meeting to the requirement of project report.
13.	Comparison of average monthly temperature of pre and post mine operation after obtaining EC shall be elaborated for post three years and a record to be maintain at regular interval.

Water quality monitoring and mitigation measures

1.	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.
2.	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.
3.	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.
4.	Monitoring of water quality upstream and downstream of river including ponds, lakes, tanks 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.
5.	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.
6.	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.
7.	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific

	requirement (standards).
8.	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.
9.	The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine 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.
10.	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.
11.	Domestic water shall be providing to the residents/villages which are coming under the zone of influence of the project due to ground water extraction and mining operation by installing adequate number of RO plants with proper supply line and Taps within 2 years
12.	No obsolete technologies for sewage treatment shall be implemented. Construction of Sewage Treatment Plant with latest technology should be completed within 2 years and treated water shall be reused for plantation. CTE and CTO of STP shall be obtained as per the norms.

Noise and Vibration monitoring and prevention

1.	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.
2.	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.

Mining Plan

1.	5- Star Rating is mandatory to obtaine certification as per guidelines of Mininstry of Coal
2.	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
3.	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).
4.	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.
5.	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.
6.	PP shall adopt mining method by preferably using surface miners for the project and silo loading through in-pit conveyor should be adopted
7.	Tranportation of coal till Railway Siding shall be developed to avoid transportation through Road

DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

Land Recalvation

1.	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).
2.	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.
3.	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.
4.	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. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
5.	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.
6.	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.
7.	Top soil should be stored separately at marked area and necessary vegetation shall be maintained to avoid any entrainment of dust
8.	Progressive backfilling of mine and progressive reclamation of OB dump shall be done
9.	Active OB Dump should not be kept barren/open and should be covered by temporary grass to avoid air born of particles
10.	PP shall explore the possibilities of utilization of OB material for different purposes (in construction of roads/ manufacture of artificial sand, aggregates/ use for farmers etc.)
11.	All approach roads to mine and all other roads which are in regular use should be black topped. The maintenance of road shall be done by PP in collaboration with state government
12.	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 MoEF&CC
Green belt	
1.	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.
2.	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. And Plantation should also be carried out in nearby area with consent of forest department and gram panchayat within 10 km radius with its proper maintenance
Public hearing and Human health issues	
1.	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.
2.	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.
3.	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.
4.	Implementation of the time bound 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 time bound 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.
5.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-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'.
6.	PP to conduct need based assessment survey of the area to for in order to decide the activities to be carried under the CSR and to provide detail of the activity carried out with adequate budgetary provision and time bound action plan.
7.	PP should conduct epidemiology study to (analysis of the distribution, patterns and determinants of health and disease conditions in defined populations).
8.	Permanent Health care facilities of Hospital should be established within 5 km of project boundary for the local people.
9.	PP must ensure an emergency action plan during pandemic in order to provide assistance to the nearby villages located within the 10 km radius buffer zone (If required)
10.	PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone within one year
11.	PP to take measure for installation of Renewable Energy sources in nearby area falling within 10 km radius

12.	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
13.	Adequate facility of drinking water, plantation and other social amenities should be provided to established R&R villages.
14.	Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.
15.	Compensation of the land acquired for the project shall be settled as per the R&R Policy within fixed timeline

Corporate Environment Responsibility

1.	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.
2.	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.
3.	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.
4.	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
5.	PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority

Miscellaneous

1.	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.
2.	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.
3.	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.
4.	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.

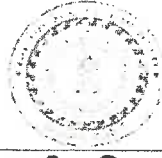
5.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
6.	The project proponent shall submit the environmental statement 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.
7.	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
8.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
9.	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.
10.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
11.	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.
12.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
13.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
14.	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.
15.	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.

Day 2 -27/06/2023

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Amendment of Environment Clearance of Pakri Barwadih Coal Mining Project, NTPC Limited by NTPC LIMITED located at HAZARIBAGH, JHARKHAND			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
IA/JH/CMIN/433614/2023	J-11015/692/2007-IA-II(M)	16/06/2023	Mining of minerals (1(a))



कार्यालय:-वन प्रमंडल पदाधिकारी, सिमडेगा वन प्रमंडल, सिमडेगा।

E-mail - dfo-simdega@gov.in

Mobile No - 8987790117

Pin Code - 835235

पत्रांक-1457 दिनांक-14/07/2025

सेवा में,

श्री दीपक लेंका, (युनिट हेड)
हिण्डाल्को इन्डस्ट्रीज लिमिटेड,
चकला कोल ब्लॉक, चंदावा,
प्लॉट नं०-894, कंचारीनगरी,
पोस्ट + थाना - चंदावा,
जिला - लातेहार, झारखंड
पिन नं०-829203

विषय :- चकला कोल ब्लॉक के लिए प्रस्तावित रेल एवं सड़क मार्ग के क्षतिपूरक वनरोपण हेतु मौजा-पिथरा, थाना-सिमडेगा, थाना सं०-48 के कुल रकबा-146.79 एकड़ का निर्गत किये गये उपयुक्तता/अनापत्ति प्रमाण-पत्र की नवीनतम प्रति एवं उसकी अद्यतन जानकारी उपलब्ध कराने के संबंध में।

प्रसंग :- आपका पत्रांक-HIL/CCB/CA LAND/2025-26/62, दिनांक-08.07.2025

महाशय,

उपरोक्त विषयक प्रसांगिक पत्र द्वारा सूचित किया गया है कि मौजा-पिथरा, थाना सं०-48, थाना-सिमडेगा, जिला-सिमडेगा के विभिन्न प्लॉटों का कुल रकबा-146.79 एकड़ भूमि का क्षतिपूरक वनरोपण योजना हेतु इस कार्यालय का पत्रांक-1766, दिनांक-25.06.2022 द्वारा उपयुक्तता/अनापत्ति प्रमाण-पत्र निर्गत किया गया है। इस क्रम में आपके द्वारा पत्रांक-HIL/CCB/CA LAND/2024-25/156, दिनांक-01.03.2025 के माध्यम से उक्त भूमि रकबा-146.79 एकड़ का वन, पर्यावरण एवं जलवायु परिवर्तन विभाग झारखंड सरकार के पक्ष में निबंधन, नामांतरण एवं हस्तांतरण किये जाने की सूचना देते हुए अभिलेख की मात्र 01 प्रति उपलब्ध कराई गई है। वर्तमान में अद्यतन स्थिति यही है।

विश्वासभाजन

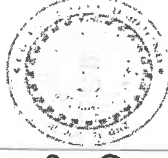
(Signature)
14/07/25

वन प्रमंडल पदाधिकारी,
सिमडेगा वन प्रमंडल, सिमडेगा।

14/07/2025

DEEPAK LENKA
Unit Head

Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa



कार्यालय:-वन प्रमंडल पदाधिकारी, सिमडेगा वन प्रमंडल, सिमडेगा।

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Mobile No – 8987790117

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पत्रांक- 1717 दिनांक- 08/8/2025

सेवा में,

श्री दीपक लेंका, (युनिट हेड)
हिण्डाल्को इन्डस्ट्रीज लिमिटेड,
चकला कोल ब्लॉक, चंदवा,
प्लॉट नं०-894, कंचारीनगरी,
पोस्ट + थाना – चंदवा,
जिला – लातेहार, झारखंड
पिन नं०-829203

विषय :- मौजा-पिथरा, थाना-सिमडेगा, थाना सं०-48, जिला-सिमडेगा के विभिन्न प्लॉटों का कुल रकबा-19.72 एकड़ रैयती भूमि का क्षतिपूरक वनरोपण योजना हेतु संशोधित 20 वर्षीय प्राक्कलन के संबंध में।

प्रसंग :- इस कार्यालय का पत्रांक-1469 दिनांक-16.07.2025

महाशय,

उपरोक्त विषयक प्रसांगिक पत्र के संदर्भ में सूचित करना है कि लातेहार जिला अन्तर्गत चकला कोल ब्लॉक चंदवा में कोयला खान हेतु आवंटित वनभूमि अपयोजन के बदले इस प्रमंडल अन्तर्गत मौजा-पिथरा, थाना-सिमडेगा, थाना सं०-48, जिला-सिमडेगा के विभिन्न प्लॉटों का कुल रकबा-146.79 एकड़ भूमि का क्षतिपूरक वनरोपण योजना हेतु निर्गत उपयुक्तता प्रमाण-पत्र एवं आपके द्वारा वन, पर्यावरण एवं जलवायु परिवर्तन विभाग झारखंड सरकार के पक्ष में निबंधन, नामांतरण एवं हस्तांतरण किये जाने के उपरांत रकबा 11.50 एकड़ एवं 8.22 एकड़ कुल 19.72 एकड़ क्षतिपूरक वनरोपण योजना का 10 वर्षीय प्राक्कलन वर्तमान मजदूरी के दर पर तैयार कर भेजी गई थी। जिसे संशोधित कर 20 वर्षीय संशोधित प्राक्कलन वर्तमान मजदूरी के दर पर तैयार कर 07-07 प्रतियों में पत्र के साथ संलग्न कर भेजी जा रही है। यदि प्राक्कलन में किसी प्रकार की त्रुटि पाये जाने पर अथवा भविष्य में मजदूरी दर में अत्याधिक वृद्धि होने पर अतिरिक्त राशि प्रयोक्ता अभिकरण को देय होगा।

अनु०-यथोक्त।

विश्वासभाजन

वन प्रमंडल पदाधिकारी,

सिमडेगा वन प्रमंडल, सिमडेगा।

08/8/2025

DEEPAK LENKA
Unit Head

Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

कार्यालय:- वन प्रमण्डल पदाधिकारी, सिमडेगा वन प्रमण्डल, सिमडेगा

1 योजना का नाम -

M/s Hindalco Industries Ltd. के द्वारा चकला कॉल ब्लॉक, चन्दवा, जिला-लातेहार अन्तर्गत अपयोजित की जानेवाली वनभूमि के बदले 20 वर्षीय क्षतिपूर्क वृक्षारोपण का प्राक्कलन

3 प्रक्षेत्र का नाम

सिमडेगा वन क्षेत्र।

4 स्थल का नाम -

पिथरा

थाना नं० - सिमडेगा/48

5 पौधों की संख्या -

1100 पौधे/हे०

6 कुल पौधों की संख्या

3660 पौधे

7 रकबा

3.327 हे०

8 प्लॉट नं०

2349, 2350, 2355

(A) अग्रिम कार्य (प्रथम वर्ष) 2025-26

मजदूरी दर -

422.00

क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस	मजदूरी	सामग्री/हे०	कुल मानव दिवस	कुल मजदूरी	कुल सामग्री	कुल प्राक्कलित राशि	अभ्युक्ति
1	सफाई एवं सीमांकन	हे०	3.00	1266.00	50.00	9.98	4,211.98	166.35	4,378.33	
2.1	झाड़ी सफाई (घनी झाड़ी)	हे०	10.00	4220.00	0.00	33.27	14,039.94	-	14,039.94	
2.2	लैंडाना को जड़ सहित छाड़ाकर 10 मीटर दूरी तक संग्रहण कर जलाने का कार्य			0.00	0.00	0.00	-	-	-	
2.3	पहली बार माह सितम्बर-नवम्बर		50.00	21100.00	14500.00	166.35	70,199.70	48,241.50	1,18,441.20	
2.4	दूसरी बार दिसम्बर-फरवरी		35.00	14770.00	0.00	116.45	49,139.79	-	49,139.79	
3	घेरान कार्य	हे०								घेरान स्थल विशिष्ट होगा।
3.1	आर०सी०सी० पीलर 41 सं० 965.00 रु० प्रति पीलर। पीलर का आकार 7x4"x4" का निर्माण एवं 1'x1'x2' का गड्ढा में डलाई कर लगाने का कार्य			15826.00	23739.00		52,653.10	78,979.65	1,31,632.76	
3.2	कटीला तार 3 point apply 12swg, 15cm apart 82.5 रु० प्रति कि०ग्रा० (जी०एस०टी० सहित Item No. 31/M215) की दर से 144.65 सी० (7 लाईन एवं 2 लाईन)				11933.63		-	39,703.19	39,703.19	
3.3	कटीला तार को खींचने, सीधा करने, स्खेल इत्यादि लगाने का कार्य सहित।		3.81	1607.82	0.00	12.68	5,349.22	-	5,349.22	तार का कच विनिर्दिष्ट/GeM के माध्यम से किया जाएगा।
3.4	आर०सी०सी० पीलर एवं कटीले तार की कार्य स्थल तक डलाई 15% of (3.1+3.2)				7724.79	0.00	-	25,700.38	25,700.38	
3.5	घेरान में PVC जाली, बांस इत्यादि से फेंसिंग का सुवृद्धिकरण (जमीन से 2 फीट उंच)	LS			8146.28	0.00	-	27,102.67	27,102.67	
4	मृदा कार्य - पौधा लगाने हेतु (60cm X 60cm X 60cm) अकार का गड्ढा बनाना @0.17 मानव दिवस	हे०	187.00	78914.00	0.00	622.00	2,62,484.00	-	2,52,484.00	
5	मृदा एवं जल संरक्षण कार्य कंदूर ट्रेंच 120 कंदूर ट्रेंच साईज साईज 5 मी० X 0.30 मी० X 0.30 मी० का खोदा जाना जिसके बीच की दूरी 2मी० से 3मी० हो तथा इसकी मिट्टी का नीचे काढाल पर 0.15 मी० हट कर 0.30 मी० की चौड़ाई में 0.15 मी० गहरा कोढ़नी कर रखा जाना।	हे०	55.00	23210.00	0.00	183.00	77,226.00	-	77,226.00	
6	सिल्ट डिटेन्सन डैम, चेकडैम, रिटेनिंग एवं ब्रेस्ट वाल, टो वाल, स्पर एवं टोरेन्ट नियंत्रण कार्य आदि।	हे०	25.00	10550.00	0.00	83.00	35,026.00	-	35,026.00	
7	गली प्लानिंग	हे०	10.00	4220.00	0.00	33.00	13,926.00	-	13,926.00	
8	लेबर सेरा का मजदूरी का 1 प्रतिशत		0.00		1756.84	0.00	-	5,842.56	5,842.56	
9	विश्विध कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार मुद्रण एवं संकलन आदि) कुल राशि का 7 प्रतिशत	योग -	378.81	1,75,683.82	87,850.54	1,259.72	5,84,255.73	2,25,736.30	8,09,992.03	
10	प्रवेश बिन्दु कार्य प्रथम एवं द्वितीय वर्ष का 15 प्रतिशत		0.00		0.00	0.00	-	-	3,88,494.68	
	कुल -		378.81	1,75,683.82	84,442.64	1,259.72	5,84,255.73	2,80,938.21	12,53,688.63	

(B) समापन कार्य (द्वितीय वर्ष) 2026-27

मजदूरी दर -

485.30

क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पौधा (न्यूनतम 6 फीट) कय एवं परिवहन 20 प्रतिशत अतिरिक्त सहित (130X/105 रु० प्रति पौधा)				138600.00	0.00	-	4,61,122.20	4,61,122.20	
2	वृक्षारोपण (0.0225 मानव दिवस प्रति पौधा)	हे०	24.75	12011.18	0.00	82.34	39,961.18	-	39,961.18	
3	पौधों को सहारा देने हेतु खूँटा का उपयोग करना (0.02 मा०दि० प्रति पौधा एवं 10.00 रु० सामग्री प्रति पौधा)		22.00	10676.60	11000.00	73.19	35,521.05	36,597.00	72,118.05	
3	तीन निकोनी एवं कोढ़नी (0.08 मानव दिवस प्रति पौधा)	हे०	66.00	32029.80	0.00	219.58	1,06,563.14	-	1,06,563.14	
5	पौधों की सुरक्षा	स्थल	275.00	133457.50	0.00	275.00	1,33,457.50	-	1,33,457.50	25 हे० तक हे० हेतु 1 पशुखसक एवं उससे अधिक हेतु 2 पशुखसक
6	सामग्री (बीज, उपरंक, खाद रसायन आदि 6.00 रु० प्रति पौधा)	हे०	0.00	0.00	4950.00	0.00	-	16,468.65	16,468.65	
7	जैविक खाद का उपयोग (दो कि०ग्रा० प्रति पौधा)	हे०	0.00	0.00	22000.00	0.00	-	73,194.00	73,194.00	
8	पटवन आवश्यकतानुसार (0.09 मानव दिवस प्रति पौधा)		99.00	48044.70	0.00	329.37	1,59,844.72	-	1,59,844.72	
9	बोरिंग+मशीन+टैंक	LS						6,00,000.00	6,00,000.00	10 हे० तक 01 बोरिंग 10 हे० से 30 हे० तक 02 बोरिंग, 30 हे० से 50 हे० तक 03 बोरिंग
10	पटवन के लिए डीजल (चार माह हेतु)	LS						29,212.80	29,212.80	
11	विश्विध कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार मुद्रण एवं संकलन आदि) कुल राशि का 7 प्रतिशत				25030.60			83,276.81	83,276.81	
12	लेबर सेरा का मजदूरी का 1 प्रतिशत		0.00	0.00	2362.20	0.00	-	4,753.48	4,753.48	
	कुल -		486.75	236219.78	203942.80	979.49	4,75,347.59	13,04,624.93	17,79,972.52	

(C) सम्पौषण कार्य (तृतीय वर्ष) 2027-28

मजदूरी दर -

558.10

क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	दो कोढ़नी निकोनी (0.04 मानव दिवस प्रति पौधा)	हे०	44.00	24556.40	0.00	146.39	81,699.14	-	81,699.14	
2	सामग्री (बीज, उपरंक, कम्पोस्ट खाद डी.ए.पी. / गुरिया/जैविक किटनाशक आदि)(4.5/रु० प्रति पौधा)	हे०	0.00	0.00	4950.00	0.00	-	16,468.65	16,468.65	
3	पौधों की सुरक्षा	स्थल	365.00	203706.50	0.00	365.00	2,03,706.50	-	2,03,706.50	

DEEPA LENKA
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Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

4	घरान का मरम्मत (5% of construction)			0.00	3288.32	0.00		10,940.24	10,940.24	
5	पटवन आवश्यकतानुसार (0.135 मानव दिवस प्रति पीछा)		148.50	82877.85	0.00	494.06	2,75,734.61	-	2,75,734.61	
6	मृत पीछों का प्रतिस्थापन (10% पीछे 110 पीछे/हे०, प्रति पीछा मानव दिवस 0.023 एवं प्रति पीछा सामग्री 105 रु०)		36.30	20259.03	11550.00	120.77	67,401.79	38,426.85	1,05,828.64	
7	विविध कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार मुद्रण एवं संकलन आदि) कुल राशि का 7 प्रतिशत				11332.00	0.00		37,701.56	37,701.56	
8	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	3314.00	0.00		6,285.42	6,285.42	
	कुल -		593.80	331399.78	34434.32	1126.22	6,28,542.04	1,09,822.73	7,38,364.77	
(D)	सम्पोषण कार्य (चतुर्थ वर्ष) 2028-29	मजदूरी दर -			641.81					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	दो कोइली निकाली (0.04 मानव दिवस प्रति पीछा)	हे०	44.00	28239.64	0.00	146.39	93,953.28	-	93,953.28	
2	सामग्री (बीज, उपरक, कम्पोस्ट खाद डी.ए.पी. / यूरिया / जैविक किटनाशक आदि)(4.5/रु० प्रति पीछा)	हे०	0.00	0.00	4950.00	0.00	-	16,468.65	16,468.65	
3	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	234260.65	0.00	365.00	2,34,260.65	-	2,34,260.65	
4	मृत पीछों का प्रतिस्थापन (75 पीछे/हे०, प्रति पीछा मानव दिवस 0.06 एवं प्रति पीछा सामग्री 105 रु०)	हे०	4.50	2888.15	7875.00	14.97	9,608.86	26,200.13	35,808.98	
5	पटवन आवश्यकतानुसार (0.045 मानव दिवस प्रति पीछा)		49.50	31769.60	0.00	164.69	1,05,697.44	-	1,05,697.44	
6	विविध कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार मुद्रण एवं संकलन आदि) कुल राशि का 7 प्रतिशत				6697.00	0.00		22,280.92	22,280.92	
7	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	2971.58	0.00	-	4,435.20	4,435.20	
	कुल -		463.00	297158.03	22493.58	691.05	4,43,520.23	69,384.90	5,12,905.13	
(E)	सम्पोषण कार्य (पंचम वर्ष) 2029-30	मजदूरी दर -			738.08					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	दो कोइली निकाली (0.02 मानव दिवस प्रति पीछा)	हे०	22.00	16237.76	0.00	73.19	54,023.03	-	54,023.03	
2	सामग्री (बीज, उपरक, कम्पोस्ट खाद डी.ए.पी. / यूरिया / जैविक किटनाशक आदि)(4.5/रु० प्रति पीछा)	हे०	0.00	0.00	4950.00	0.00	-	16,468.65	16,468.65	
3	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	269399.20	0.00	365.00	2,69,399.20	-	2,69,399.20	
4	मृत पीछों का प्रतिस्थापन (50 पीछे/हे०, प्रति पीछा मानव दिवस 0.08 एवं प्रति पीछा सामग्री 105 रु०)		3.00	2214.24	5250.00	9.98	7,366.78	17,466.75	24,833.53	
	विविध कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार मुद्रण एवं संकलन आदि) कुल राशि का 7 प्रतिशत				3763.50			12,521.16	12,521.16	
	घरान का मरम्मत (5% of construction)				3288.32			10,940.24	10,940.24	
5	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		2878.51	0.00	-	3,307.89	3,307.89	
	कुल -		390.00	287851.20	20130.33	448.18	3,30,789.00	60,704.70	3,91,493.70	
(F)	सम्पोषण कार्य (षष्ठम वर्ष) 2030-31	मजदूरी दर -			848.79					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	309808.35	0.00	365.00	3,09,808.35	-	3,09,808.35	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		3098.08	0.00	-	3,098.08	3,098.08	
	कुल -		365.00	309808.35	3098.08	365.00	3,09,808.35	3,098.08	3,12,906.43	
(G)	सम्पोषण कार्य (सप्तम वर्ष) 2031-32	मजदूरी दर -			976.11					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	356280.15	0.00	365.00	3,56,280.15	-	3,56,280.15	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		3562.80	0.00	-	3,562.80	3,562.80	
	कुल -		365.00	356280.15	3562.80	365.00	3,56,280.15	3,562.80	3,59,842.95	
(H)	सम्पोषण कार्य (अष्टम वर्ष) 2032-33	मजदूरी दर -			1122.53					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	409723.45	0.00	365.00	4,09,723.45	-	4,09,723.45	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		4097.23	0.00	-	4,097.23	4,097.23	
	कुल -		365.00	409723.45	4097.23	365.00	4,09,723.45	4,097.23	4,13,820.68	
(I)	सम्पोषण कार्य (नवम वर्ष) 2033-34	मजदूरी दर -			1290.91					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	471182.15	0.00	365.00	4,71,182.15	-	4,71,182.15	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		4711.82	0.00	-	4,711.82	4,711.82	
	कुल -		365.00	471182.15	4711.82	365.00	4,71,182.15	4,711.82	4,75,893.97	
(J)	सम्पोषण कार्य (दशम वर्ष) 2034-35	मजदूरी दर -			1484.54					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	541857.10	0.00	365.00	5,41,857.10	-	5,41,857.10	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		5418.57	0.00	-	5,418.57	5,418.57	
	कुल -		365.00	541857.10	5418.57	365.00	5,41,857.10	5,418.57	5,47,275.67	
(K)	सम्पोषण कार्य (ग्यारहवां वर्ष) 2035-36	मजदूरी दर -			1707.23					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	623138.95	0.00	365.00	6,23,138.95	-	6,23,138.95	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		6231.39	0.00	-	6,231.39	6,231.39	
	कुल -		365.00	623138.95	6231.39	365.00	6,23,138.95	6,231.39	6,29,370.34	
(L)	सम्पोषण कार्य (बारहवां वर्ष) 2036-37	मजदूरी दर -			1963.31					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	716608.15	0.00	365.00	7,16,608.15	-	7,16,608.15	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		7166.08	0.00	-	7,166.08	7,166.08	

Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

कुल -		365.00	716608.15	7166.08	365.00	7,16,608.15	7,166.08	7,23,774.23	
(M) सम्पोषण कार्य (तेरहवां वर्ष) 2037-38	मजदूरी दर -			2257.81					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	824100.65	0.00	365.00	8,24,100.65	-	8,24,100.65
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		8241.01	0.00		8,241.01	8,241.01
	कुल -		365.00	824100.65	8241.01	365.00	8,24,100.65	8,241.01	8,32,341.66
(N) सम्पोषण कार्य (चौदहवां वर्ष) 2038-39	मजदूरी दर -			2596.48					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	947715.20	0.00	365.00	9,47,715.20	-	9,47,715.20
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		9477.15	0.00		9,477.15	9,477.15
	कुल -		365.00	947715.20	9477.15	365.00	9,47,715.20	9,477.15	9,57,192.35
(O) सम्पोषण कार्य (पन्ध्रवां वर्ष) 2039-40	मजदूरी दर -			2985.95					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1089871.75	0.00	365.00	10,89,871.75	-	10,89,871.75
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		10898.72	0.00		10,898.72	10,898.72
	कुल -		365.00	1089871.75	10898.72	365.00	10,89,871.75	10,898.72	11,00,770.47
(P) सम्पोषण कार्य (सोलहवां वर्ष) 2040-41	मजदूरी दर -			3433.84					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1253351.60	0.00	365.00	12,53,351.60	-	12,53,351.60
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		12533.52	0.00		12,533.52	12,533.52
	कुल -		365.00	1253351.60	12533.52	365.00	12,53,351.60	12,533.52	12,65,885.12
(Q) सम्पोषण कार्य (सत्रहवां वर्ष) 2041-42	मजदूरी दर -			3948.92					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1441355.80	0.00	365.00	14,41,355.80	-	14,41,355.80
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		14413.56	0.00		14,413.56	14,413.56
	कुल -		365.00	1441355.80	14413.56	365.00	14,41,355.80	14,413.56	14,55,769.36
(R) सम्पोषण कार्य (अठारहवां वर्ष) 2042-43	मजदूरी दर -			4541.25					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1657556.25	0.00	365.00	16,57,556.25	-	16,57,556.25
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		16575.56	0.00		16,575.56	16,575.56
	कुल -		365.00	1657556.25	16575.56	365.00	16,57,556.25	16,575.56	16,74,131.81
(S) सम्पोषण कार्य (उनीसवां वर्ष) 2043-44	मजदूरी दर -			5222.44					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1906190.60	0.00	365.00	19,06,190.60	-	19,06,190.60
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		19061.91	0.00		19,061.91	19,061.91
	कुल -		365.00	1906190.60	19061.91	365.00	19,06,190.60	19,061.91	19,25,252.51
(T) सम्पोषण कार्य (बीसवां वर्ष) 2044-45	मजदूरी दर -			6005.81					
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	2192120.65	0.00	365.00	21,92,120.65	-	21,92,120.65
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		21921.21	0.00		21,921.21	21,921.21
	कुल -		365.00	2192120.65	21921.21	365.00	21,92,120.65	21,921.21	22,14,041.86

या 1,95,64,694.00

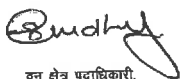
कार्य विवरणी	कुल प्राकलित राशि
अग्रिम कार्य (प्रथम वर्ष) 2025-26	12,53,688.63
समापन कार्य (द्वितीय वर्ष) 2026-27	17,79,972.52
सम्पोषण कार्य (तृतीय वर्ष) 2027-28	7,38,364.77
सम्पोषण कार्य (चतुर्थ वर्ष) 2028-29	5,12,905.13
सम्पोषण कार्य (पंचम वर्ष) 2029-30	3,91,493.70
सम्पोषण कार्य (षष्ठम वर्ष) 2030-31	3,12,906.43
सम्पोषण कार्य (सप्तम वर्ष) 2031-32	3,59,842.95
सम्पोषण कार्य (अष्टम वर्ष) 2032-33	4,13,820.68
सम्पोषण कार्य (नवम वर्ष) 2033-34	4,75,893.97
सम्पोषण कार्य (दशम वर्ष) 2034-35	5,47,275.67
सम्पोषण कार्य (ग्यारहवां वर्ष) 2035-36	6,29,370.34
सम्पोषण कार्य (बारहवां वर्ष) 2036-37	7,23,774.23
सम्पोषण कार्य (तेरहवां वर्ष) 2037-38	8,32,341.66
सम्पोषण कार्य (चौदहवां वर्ष) 2038-39	9,57,192.35
सम्पोषण कार्य (पन्ध्रवां वर्ष) 2039-40	11,00,770.47
सम्पोषण कार्य (सोलहवां वर्ष) 2040-41	12,65,885.12
सम्पोषण कार्य (सत्रहवां वर्ष) 2041-42	14,55,769.36
सम्पोषण कार्य (अठारहवां वर्ष) 2042-43	16,74,131.81
सम्पोषण कार्य (उनीसवां वर्ष) 2043-44	19,25,252.51
सम्पोषण कार्य (बीसवां वर्ष) 2044-45	22,14,041.86
योग-	1,95,64,694.15

या, 1,95,64,694.00

(एक करोड़ पंचानव लाख चौसठ हजार छः सौ बीसगने) मात्र।

अपर प्रधान मुख्य वन संरक्षक, विकास, झारखण्ड, रॉली के कार्यालय आदेश संख्या- 01-यो0व0-30/2020-21 दिनांक-08.08.2024 द्वारा स्वीकृत दर के आधार पर एवं वन (संरक्षण एवं संवर्धन) नियम, 2023 के नियम संख्या-13 के अनुसार 20 वर्षीय प्राकलन तैयार किया गया है।

समर्थित



वन क्षेत्र पदाधिकारी,
सिमडेगा वन क्षेत्र।

वन प्रमण्डल पदाधिकारी,
सिमडेगा वन प्रमण्डल, सिमडेगा।

DEEPAK LENTHA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

कार्यालय:- वन प्रमण्डल पदाधिकारी, सिमडेगा वन प्रमण्डल, सिमडेगा।

1. योजना का नाम -	M/s Hindalco Industries Ltd. के द्वारा चकला कॉल ब्लॉक, चन्दवा, जिला-लातेहार अन्तर्गत अपयोजित की जानेवाली वनभूमि के बदले 20 वर्षीय क्षतिपूर्क वृक्षारोपण का प्राक्कलन
3. प्रक्षेत्र का नाम	सिमडेगा वन क्षेत्र।
4. स्थल का नाम -	पिथरा
5. पौधों की संख्या -	1100 पौधे/हे०
6. कुल पौधों की संख्या	5122 पौधे
7. रकबा	4.656 हे०
8. प्लॉट नं०	1826 (अंश) 1906 (अंश)

(A) अंतिम कार्य (प्रथम वर्ष) 2025-26

मजदूरी दर -

422.00

क्र. सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस	मजदूरी	सामग्री/हे०	कुल मानव दिवस	कुल मजदूरी	कुल सामग्री	कुल प्राक्कलित राशि	अभ्युक्ति
1	सर्वेक्षण एवं सीमांकन	हे०	3.00	1266.00	50.00	13.97	5,894.50	232.80	6,127.30	
2.1	झाड़ी सफाई (घनी झाड़ी)	हे०	10.00	4220.00	0.00	46.56	19,648.32	-	19,648.32	
2.2	लैटाना को जड़ सहित उखाड़कर 10 मीटर दूरी तक संग्रहण कर जलाने का कार्य			0.00	0.00	0.00	-	-	-	
2.3	पहली बार माह सितम्बर-नवम्बर		50.00	21100.00	14500.00	232.80	98,241.60	67,512.00	1,65,753.60	
2.4	दूसरी बार दिसम्बर-फरवरी		35.00	14770.00	0.00	162.96	68,769.12	-	68,769.12	
3	घेराव कार्य	हे०								घेराव स्थल विशिष्ट होगा।
3.1	आठसौसौ पीलर 41 सं० 865.00 रु० प्रति पीलर। पीलर का आकार 7"x4"x4" का निर्माण एवं 1'x1'x2' का गड्ढा में डलाई कर लगाने का कार्य			15826.00	23739.00		73,685.86	1,10,528.78	1,84,214.64	
3.2	आठसौसौ पीलर 41 सं० 865.00 रु० प्रति पीलर। पीलर का आकार 7"x4"x4" का निर्माण एवं 1'x1'x2' का गड्ढा में डलाई कर लगाने का कार्य				11933.63		-	55,562.98	55,562.98	
3.3	कटीला तार को खींचने, सीधा करने, स्कोल इत्यादि लगाने का कार्य सहित।		3.81	1607.82	0.00	17.74	7,486.01	-	7,486.01	तार का कब निर्मित/GeM से माध्यम से किया जाएगा।
3.4	आठसौसौ पीलर एवं कटीले तार की कार्य स्थल तक डलाई 15% of (3.1+3.2)				7724.79	0.00	-	35,966.62	35,966.62	
3.5	घेराव में PVC जाली, बांस इत्यादि से फेंसिंग का सुदृढीकरण (जमीन से 2 फीट उँचा)	LS			8146.28	0.00	-	37,929.08	37,929.08	
4	मृदा कार्य - पीछा लगाने हेतु (60cm X 60cm X 60cm) आकार का गड्ढा बनाना @0.17 मानव दिवस	हे०	187.00	78914.00	0.00	871.00	3,67,562.00	-	3,67,562.00	
5	मृदा एवं जल संरक्षण कार्य केंद्र द्वैच 120 केंद्र द्वैच साईज साईज 5 मी० X 0.30 मी० x 0.30 मी० का खोदा जाना जिसके बीच की दूरी 2मी० से 3मी० हो तथा इसकी निट्टी का नीचे काढल पर 0.15 मी० हट कर 0.30 मी० की चौड़ाई में 0.15 मी० गहरा कोढ़नी कर रखा जाना।	हे०	55.00	23210.00	0.00	256.00	1,08,032.00	-	1,08,032.00	
6	सिस्ट डिटेन्शन डेम, चेकडैम, डिटेनिंग एवं ब्रेस्ट वाल, टो वाल, स्पर एवं टोरेन्ट नियंत्रण कार्य आदि।	हे०	25.00	10560.00	0.00	116.00	48,952.00	-	48,952.00	
7	मशीन प्लानिंग	हे०	10.00	4220.00	0.00	47.00	19,834.00	-	19,834.00	
8	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		1756.84	0.00	-	8,181.05	8,181.05	
9	निमित्त कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार भुदण एवं संकलन आदि) कुल राशि का 7 प्रतिशत				16592.10			77,252.82	77,252.82	
10	प्रवेश बिन्दु कार्य प्रथम एवं द्वितीय वर्ष का 15 प्रतिशत		0.00		0.00	0.00	-	-	4,97,974.30	
	योग -		378.81	1,75,683.82	67,850.54	1,764.03	8,18,105.40	3,15,913.32	11,34,018.72	

(B) सामान्य कार्य (द्वितीय वर्ष) 2026-27

मजदूरी दर -

क्र. सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछा (न्यूनतम 6 फीट) कब एवं परिवहन 20 प्रतिशत अतिरिक्त सहित (130x/105 रु० प्रति पौधा)				138600.00	0.00		6,45,321.60	6,45,321.60	
2	वृक्षारोपण (0.0225 मानव दिवस प्रति पौधा)	हे०	24.75	12011.18	0.00	115.24	55,924.03	-	55,924.03	
3	पौधों को सहारा देने हेतु खूँटा का उपयोग करना (0.02 मरालि० प्रति पौधा एवं 10.00 रु० सामग्री प्रति पौधा)		22.00	10676.50	11000.00	102.43	49,710.25	51,216.00	1,00,926.25	
3	तीन निकोनी एवं कोढ़नी (0.06 मानव दिवस प्रति पौधा)	हे०	66.00	32029.80	0.00	307.30	1,49,130.75	-	1,49,130.75	
5	पौधों की सुरक्षा	स्थल	275.00	133457.50	0.00	275.00	1,33,457.50	-	1,33,457.50	25 हे० तक हेतु 1 पशुरक्षक एवं उससे अधिक हेतु 2 पशुरक्षक
6	सामग्री (बीज, उर्वरक, खाद रसायन आदि 6.00 रु० प्रति पौधा)	हे०	0.00	0.00	4950.00	0.00	-	23,047.20	23,047.20	
7	जैविक खाद का उपयोग (दो कि०ग्र० प्रति पौधा)	हे०	0.00	0.00	22000.00	0.00	-	1,02,432.00	1,02,432.00	
8	पटवन आवश्यकतानुसार (0.09 मानव दिवस प्रति पौधा)		99.00	48044.70	0.00	460.94	2,23,696.12	-	2,23,696.12	
9	बोरिंग-मशीन-टैंक	LS						6,00,000.00	6,00,000.00	10 हे० तक 01 बोरिंग 10 हे० से 30 हे० तक 02 बोरिंग, 30 हे० से 50 हे० तक 03 बोरिंग
10	पटवन के लिए डोजल (चार माह हेतु)	LS						29,212.80	29,212.80	
11	विशिष्ट कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार भुदण एवं संकलन आदि) कुल राशि का 7 प्रतिशत				25030.80			1,16,542.47	1,16,542.47	
12	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	2362.20	0.00	-	6,119.19	6,119.19	
	कुल -		486.75	236219.78	203942.80	1260.91	6,11,918.65	15,73,691.26	21,85,609.91	

(C) सम्पोषण कार्य (तृतीय वर्ष) 2027-28

मजदूरी दर -

क्र. सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	दो कोढ़नी निकोनी (0.04 मानव दिवस प्रति पौधा)	हे०	44.00	24558.40	0.00	204.86	1,14,334.60	-	1,14,334.60	
2	तानद्री (बीज, उर्वरक, कम्पोस्ट खाद बी.ए.पी. / मुरिया/जैविक किटनाशक आदि) 4.5/रु० प्रति पौधा)	हे०	0.00	0.00	4950.00	0.00	-	23,047.20	23,047.20	

DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

3	पौधों की सुरक्षा	स्थल	365.00	203706.50	0.00	35.00	2,03,706.50	-	2,03,706.50	
4	घेरान का मरम्मत (5% of construction)			0.00	3288.32	0.00	-	15,310.42	15,310.42	
5	पटवन आवश्यकतानुसार (0.135 मानव दिवस प्रति पौधा)		148.50	82877.85	0.00	691.42	3,85,879.27	-	3,85,879.27	
6	मृत पौधों का प्रतिस्थापन (10% पौधे 110 पौधे/हे०, प्रति पौधा मानव दिवस 0.033 एवं प्रति पौधा सामग्री 105 रु०)		36.30	20259.03	11550.00	169.01	94,326.04	53,776.80	1,48,102.84	
7	विविध कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार मुद्रण एवं संकलन आदि) कुल राशि का 7 प्रतिशत		0.00	0.00	3314.00	0.00	-	7,982.46	7,982.46	
8	लेबर सेस का मजदूरी का 1 प्रतिशत		593.80	331399.78	34434.32	1430.29	7,98,246.41	1,52,878.67	9,51,125.09	
	कुल -				641.81					
(D)	सम्पोषण कार्य (चतुर्थ वर्ष) 2028-29	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	दो कोइली निकोनी (0.04 मानव दिवस प्रति पौधा)	हे०	44.00	28239.64	0.00	204.86	1,31,483.76	-	1,31,483.76	
2	सामग्री (बीज, उर्वरक, कम्पोस्ट खाद डी.ए.पी. / यूरिया / जैविक किटनाशक आदि)(4.5/रु० प्रति पौधा)	हे०	0.00	0.00	4950.00	0.00	-	23,047.20	23,047.20	
3	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	234260.65	0.00	365.00	2,34,260.65	-	2,34,260.65	
4	मृत पौधों का प्रतिस्थापन (75 पौधे/हे०, प्रति पौधा मानव दिवस 0.06 एवं प्रति पौधा सामग्री 105 रु०)	हे०	4.50	2888.15	7875.00	20.85	13,447.20	36,666.00	50,113.20	
5	पटवन आवश्यकतानुसार (0.045 मानव दिवस प्रति पौधा)		49.50	31789.60	0.00	230.47	1,47,919.23	-	1,47,919.23	
6	विविध कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार मुद्रण एवं संकलन आदि) कुल राशि का 7 प्रतिशत		0.00	0.00	2971.58	0.00	-	5,271.11	5,271.11	
7	लेबर सेस का मजदूरी का 1 प्रतिशत		463.00	297158.03	22493.58	821.29	5,27,110.85	96,165.54	6,23,276.39	
	कुल -				738.08					
(E)	सम्पोषण कार्य (पंचम वर्ष) 2029-30	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	दो कोइली निकोनी (0.02 मानव दिवस प्रति पौधा)	हे०	22.00	16237.76	0.00	102.43	75,603.01	-	75,603.01	
2	सामग्री (बीज, उर्वरक, कम्पोस्ट खाद डी.ए.पी. / यूरिया / जैविक किटनाशक आदि)(4.5/रु० प्रति पौधा)	हे०	0.00	0.00	4950.00	0.00	-	23,047.20	23,047.20	
3	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	269399.20	0.00	365.00	2,69,399.20	-	2,69,399.20	
4	मृत पौधों का प्रतिस्थापन (50 पौधे/हे०, प्रति पौधा मानव दिवस 0.06 एवं प्रति पौधा सामग्री 105 रु०)		3.00	2214.24	5250.00	13.97	10,309.50	24,444.00	34,753.50	
	विविध कार्य (अनुश्रवण मूल्यांकन छायांकन, प्रचार-प्रसार मुद्रण एवं संकलन आदि) कुल राशि का 7 प्रतिशत				3783.50		-	17,522.86	17,522.86	
	घेरान का मरम्मत (5% of construction)				3288.32		-	15,310.42	15,310.42	
5	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	2878.51	0.00	-	3,553.12	3,553.12	
	कुल -		390.00	287851.20	20130.33	481.40	3,55,311.71	83,877.59	4,39,189.30	
(F)	सम्पोषण कार्य (षष्ठम वर्ष) 2030-31	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	309808.35	0.00	365.00	3,09,808.35	-	3,09,808.35	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	3098.08	0.00	-	3,098.08	3,098.08	
	कुल -		365.00	309808.35	3098.08	365.00	3,09,808.35	3,098.08	3,12,906.43	
(G)	सम्पोषण कार्य (सप्तम वर्ष) 2031-32	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	356280.15	0.00	365.00	3,56,280.15	-	3,56,280.15	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	3562.80	0.00	-	3,562.80	3,562.80	
	कुल -		365.00	356280.15	3562.80	365.00	3,56,280.15	3,562.80	3,59,842.95	
(H)	सम्पोषण कार्य (अष्टम वर्ष) 2032-33	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	409723.45	0.00	365.00	4,09,723.45	-	4,09,723.45	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	4097.23	0.00	-	4,097.23	4,097.23	
	कुल -		365.00	409723.45	4097.23	365.00	4,09,723.45	4,097.23	4,13,820.68	
(I)	सम्पोषण कार्य (नवम वर्ष) 2033-34	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	471182.15	0.00	365.00	4,71,182.15	-	4,71,182.15	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	4711.82	0.00	-	4,711.82	4,711.82	
	कुल -		365.00	471182.15	4711.82	365.00	4,71,182.15	4,711.82	4,75,893.97	
(J)	सम्पोषण कार्य (दशम वर्ष) 2034-35	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	541857.10	0.00	365.00	5,41,857.10	-	5,41,857.10	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	5418.57	0.00	-	5,418.57	5,418.57	
	कुल -		365.00	541857.10	5418.57	365.00	5,41,857.10	5,418.57	5,47,275.67	
(K)	सम्पोषण कार्य (ग्यारहवां वर्ष) 2035-36	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	623138.95	0.00	365.00	6,23,138.95	-	6,23,138.95	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	0.00	6231.39	0.00	-	6,231.39	6,231.39	
	कुल -		365.00	623138.95	6231.39	365.00	6,23,138.95	6,231.39	6,29,370.34	
(L)	सम्पोषण कार्य (बारहवां वर्ष) 2036-37	मजदूरी दर -								
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पौधों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	716808.15	0.00	365.00	7,16,808.15	-	7,16,808.15	

DEEPAK LENKA
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Chakla Coal Mines, Chandwa

2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00	7166.08	0.00	-	7,166.08	7,166.08		
	कुल -		365.00	716608.15	7166.08	365.00	7,16,608.15	7,166.08	7,23,774.23	
(M)	सम्पोषण कार्य (तेरहवां वर्ष) 2037-38	मजदूरी दर -		2257.81						
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	824100.65	0.00	365.00	8,24,100.65	-	8,24,100.65	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		8241.01	0.00	-	8,241.01	8,241.01	
	कुल -		365.00	824100.65	8241.01	365.00	8,24,100.65	8,241.01	8,32,341.66	
(N)	सम्पोषण कार्य (चौदहवां वर्ष) 2038-39	मजदूरी दर -		2596.48						
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	947715.20	0.00	365.00	9,47,715.20	-	9,47,715.20	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		9477.15	0.00	-	9,477.15	9,477.15	
	कुल -		365.00	947715.20	9477.15	365.00	9,47,715.20	9,477.15	9,57,192.35	
(O)	सम्पोषण कार्य (पन्द्रहवां वर्ष) 2039-40	मजदूरी दर -		2985.95						
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1089871.75	0.00	365.00	10,89,871.75	-	10,89,871.75	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		10898.72	0.00	-	10,898.72	10,898.72	
	कुल -		365.00	1089871.75	10898.72	365.00	10,89,871.75	10,898.72	11,00,770.47	
(P)	सम्पोषण कार्य (सोलहवां वर्ष) 2040-41	मजदूरी दर -		3433.84						
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1253351.60	0.00	365.00	12,53,351.60	-	12,53,351.60	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		12533.52	0.00	-	12,533.52	12,533.52	
	कुल -		365.00	1253351.60	12533.52	365.00	12,53,351.60	12,533.52	12,65,885.12	
(Q)	सम्पोषण कार्य (सत्रहवां वर्ष) 2041-42	मजदूरी दर -		3948.92						
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1441355.80	0.00	365.00	14,41,355.80	-	14,41,355.80	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		14413.56	0.00	-	14,413.56	14,413.56	
	कुल -		365.00	1441355.80	14413.56	365.00	14,41,355.80	14,413.56	14,55,769.36	
(R)	सम्पोषण कार्य (अठारहवां वर्ष) 2042-43	मजदूरी दर -		4541.25						
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1657556.25	0.00	365.00	16,57,556.25	-	16,57,556.25	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		16575.56	0.00	-	16,575.56	16,575.56	
	कुल -		365.00	1657556.25	16575.56	365.00	16,57,556.25	16,575.56	16,74,131.81	
(S)	सम्पोषण कार्य (उनीसवां वर्ष) 2043-44	मजदूरी दर -		5222.44						
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	1906190.60	0.00	365.00	19,06,190.60	-	19,06,190.60	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		19061.91	0.00	-	19,061.91	19,061.91	
	कुल -		365.00	1906190.60	19061.91	365.00	19,06,190.60	19,061.91	19,25,252.51	
(T)	सम्पोषण कार्य (बीसवां वर्ष) 2044-45	मजदूरी दर -		6005.81						
क्रम सं०	कार्य की विवरणी/इकाई प्रति हे०	इकाई	मानव दिवस/हे०	मजदूरी	सामग्री/हे०	कुल मानव दिवस	मजदूरी	सामग्री	कुल व्यय	अभ्युक्ति
1	पीछों की सुरक्षा (मानव दिवस प्रति साईड)	स्थल	365.00	2192120.65	0.00	365.00	21,92,120.65	-	21,92,120.65	
2	लेबर सेस का मजदूरी का 1 प्रतिशत		0.00		21921.21	0.00	-	21,921.21	21,921.21	
	कुल -		365.00	2192120.65	21921.21	365.00	21,92,120.65	21,921.21	22,14,041.86	
						कुल -	1,78,51,553.83	24,47,387.81	2,07,98,941.64	

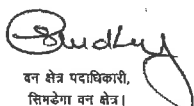
कार्य विवरणी	कुल प्राक्कलित राशि
अग्रिम कार्य (प्रथम वर्ष) 2025-26	17,09,245.84
समापन कार्य (द्वितीय वर्ष) 2026-27	21,85,809.91
सम्पोषण कार्य (तृतीय वर्ष) 2027-28	9,51,125.09
सम्पोषण कार्य (चतुर्थ वर्ष) 2028-29	6,23,276.39
सम्पोषण कार्य (पंचम वर्ष) 2029-30	4,39,189.30
सम्पोषण कार्य (षष्ठम वर्ष) 2030-31	3,12,906.43
सम्पोषण कार्य (सप्तम वर्ष) 2031-32	3,59,842.95
सम्पोषण कार्य (अष्टम वर्ष) 2032-33	4,13,820.68
सम्पोषण कार्य (नवम वर्ष) 2033-34	4,75,893.97
सम्पोषण कार्य (दशम वर्ष) 2034-35	5,47,275.67
सम्पोषण कार्य (ग्यारहवां वर्ष) 2035-36	6,29,370.34
सम्पोषण कार्य (बारहवां वर्ष) 2036-37	7,23,774.23
सम्पोषण कार्य (तेरहवां वर्ष) 2037-38	8,32,341.66
सम्पोषण कार्य (चौदहवां वर्ष) 2038-39	9,57,192.35
सम्पोषण कार्य (पन्द्रहवां वर्ष) 2039-40	11,00,770.47
सम्पोषण कार्य (सोलहवां वर्ष) 2040-41	12,65,885.12
सम्पोषण कार्य (सत्रहवां वर्ष) 2041-42	14,55,769.36
सम्पोषण कार्य (अठारहवां वर्ष) 2042-43	16,74,131.81
सम्पोषण कार्य (उनीसवां वर्ष) 2043-44	19,25,252.51
सम्पोषण कार्य (बीसवां वर्ष) 2044-45	22,14,041.86
योग-	20796915.94

या, 2,07,96,916.00

(दो करोड़ सात लाख छियाब्बे हजार नौ सौ सोलह) मात्र।

अपर प्रधान मुख्य वन संरक्षक, विकास, झारखण्ड, राँची के कार्यालय आदेश संख्या- 01-यो0ब0-30/2020-21 दिनांक-08.08.2024 द्वारा स्वीकृत दर के आधार पर एवं वन (संरक्षण एवं संवर्धन) नियम, 2023 के नियम संख्या-13 के अनुसार 20 वर्षीय प्राक्कलन तैयार किया गया है।

समर्थित


वन क्षेत्र पदाधिकारी,
सिमडेगा वन क्षेत्र।

वन प्रमण्डल पदाधिकारी,
सिमडेगा वन प्रमण्डल, सिमडेगा।


DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

No. PL/ HIL/BIRATOLI/02082021

Date 13.02.2024

Project Head
Chakla coal Block,
Hindalco Industries Ltd.
Ranchi.

Sub: Request of M/s Hindalco for work permit for development of Chakla siding taking off Biratoli.

Ref: (i) M/s Hindalco letter no. HIL/Rly/Ch/ 2023-24 dated 24.11.2023
(ii) M/s Hindalco letter no. HIL/ Ch/Railway/ 2023-24/305 dated 22.01.2024
(iii) Sr. DEN (1) letter no. W/500/Drg./Pt. XII dated 15.12.2023

In reference to above, Permission for construction of Chakla siding work is hereby granted subject to compliance of following stipulations:

Civil:

1. Barricading of running track as per approved drawing, undertaking given vide referred letter & prior information to SSE/P-Way/Tori, SSE/Signal/Balumath, SSE/TRD/Latehar & IOW/Tori.
2. Suitable barricading work should be followed as per Annexure-I of CE circular no. 190 of C.R letter no. T103/PWT-18/XXI dated 18.01.2008.
3. Work should be executed as per approved ESP CE drawing no.Y-02/2023 (02 sheets) & L section no. 2157_ECR_HIL_HO_DPR_DRW_001 dated 25.04.2023 as communicated vide letter no. (iii).
4. RDSO guidelines for "safety precautions at worksite adjacent to track (CAMTECH/2015/C/SPWSAT/1.0 Sep. 2015)" should be followed.
5. Joint note should be followed while working in the vicinity of railway land with Engineering, Signalling, and Electrical & telecommunication dept.
6. Competency certificate as per para no.1406 OF IRPWM should be issued to supervisor of contractor from Railway officials before start of work.
7. All safety precautions while working in vicinity of running tracks should be ensured.

S&T

1. Joint note regarding in which portion work can be executed without damaging any signalling assets must be prepared.
2. Chuna marking from railway side will be provided. Work to be done 02 meter away from the marking.


DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa

3. While working in proximity in that marking, it must be informed to all concerned.
4. For those area where infringement occurs, utilities must be shifted and then only work should start.
5. In case of cable damage, penalty clauses will be operated as issued by RB.
6. In case of damage of cable, work executing agency will change the cable and make it permanent joint (As prescribed for signalling cable), continuity test will be done by open line.
7. Undertaking issued by M/s Hindalco Industries ltd regarding safety of track, cables, TRD mast & any other Rly assets must be ensured.

Trd:

1. Joint note regarding in which portion work can be executed without damaging any TRD assets must be prepared.
2. Any change in TRD assets or extension /modification during work, TRD installation would be modified accordingly by siding owner. Supervision will be done by Railway.
3. While working in proximity in that marking, it must be informed to TRD control at BRKA & SSE/TRD/LTHR.
4. For those area where infringement occurs, utilities must be sifted and then only work should start.
5. In case of TRD assets damage, penalty clauses will be operated as issued by RB.
6. During execution of work, all safety precaution to be ensured as per RB guidelines.

Necessary action may please be taken accordingly.

Digitally Signed by Suchi
Singh

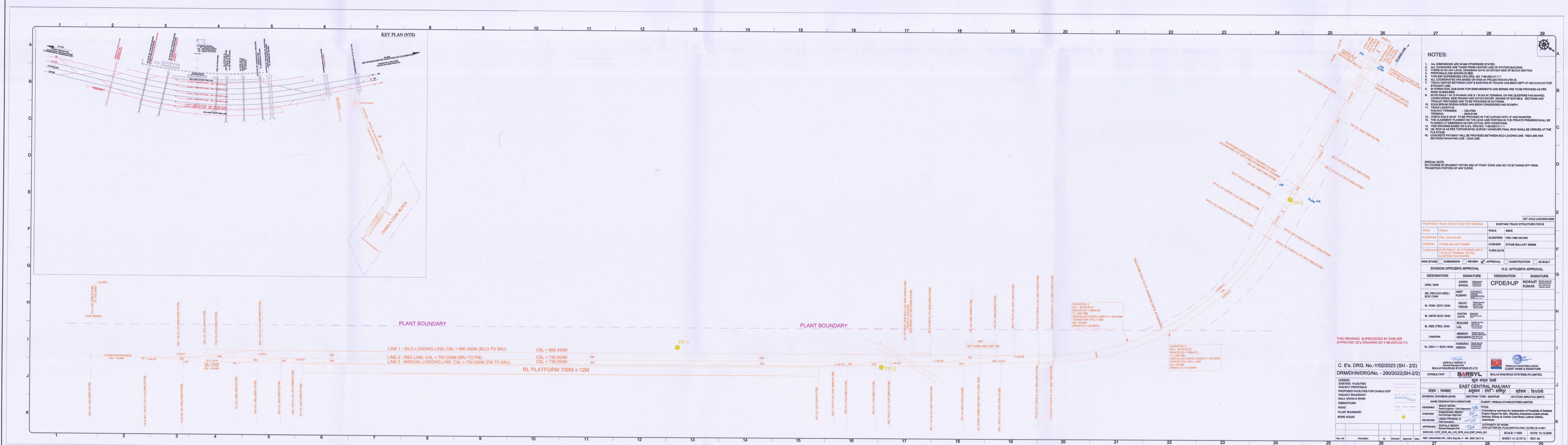
Date: 13-02-2024 13:50:15

Reason: Approved
Sr. Divisional Operations Manager (Pl)
East Central Railway, Dhanbad,

Copy to:

- (i) COS(G) for kind information to DRM/DHN, please.
- (ii) Sr. DEN (1) for kind information and necessary action, please.
- (iii) Sr. DSTE (C) for kind information and necessary action, please.
- (iv) Sr. DEE (Trd) for kind information and necessary action, please.
- (v) Dy. CE (C)/HZBN for kind information and necessary action, please.


DEEPAK LENKA
Unit Head
Hindalco Industries Ltd.
Chakla Coal Mines, Chandwa



26/9/25