## इंस्टर्न कोसफील्ड्स सिमिटेड

(कोल इंडिया लिमिटेड का एक सहायक संस्था) अध्यक्ष-सह-प्रबंध निदेशक का कार्यालय संकटोरिया,पो -दिशरगढ ज़िला -वर्धमान) प.बं(-713333 योजना एवं परियोजना विभाग सी.आइ.एन -U10101WB1975GOI030295 वेबसाइट -www.easterncoal.gov.in



## EASTERN COALFIELDS LTD

(A SUBSIDIARY OF COAL INDIA LTD.) Office of the Chairman cum Managing Director

Sanctoria · P.O · Dishergarh · Dist - Burdwan (W.8) - 713333 Project & Planning Department CIN-U10101WB1975GOI030295 Website-www.easterncoal.gov.in

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Dated: 25-07-2018

Ref: ECL/ P&P/ 2018/\\ General Manager (Environment), ECL HQ.

Sub: Hard copy of PR of Tilaboni UG Mine approved by ECL Board

Dear Sir,

PR of Tilaboni UG Mine (1.86 MTY) has been approved by ECL Board in its 314<sup>th</sup> Board meeting of ECL Board. The hard copy of this PR is enclosed herewith for necessary action in respect of Forestry Clearance. Soft copy has already been sent.

This is for your information and necessary action at your end.

## Encls:

- 1. PR of Tilaboni UG Mine (1.86 MTY)
- 2. Minutes of 314th ECL Board meeting.

## Copy:

- 1. GM/TS to DT(P&P)
- 2. RD, RI-1, with a request to provide information required for Forestry Clearance for Tilaboni UG Mine
- 3. GM, Bankola,

ENVIRONMENT DEPT

पर्यावरण विभाग / ईसीएल मुख्यालय Environment Deptt./ECL. HQ.

Sri R. Samante GMI
Application for Tilatom
Forest land Tilatom

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ईस्टर्न कोलफील्ड्स लिमिटेड (कोल इण्डिया लिमिटेड का एक अंग) अध्यक्ष-सह-प्रबंध निदेशक का कार्यालय सांकतोड़िया, पोस्ट-डिसरगइ, जिला-पिश्म बर्धमान (प.ब), कंपनी सचिवालय, टेलिफैक्स: 0341-2520546, सी-आई.एन: U10101WB1975GOI030295 वेबसाइट: www.easterncoal.gov.in एक आईएसओ 9001, आईएसओ 14001 एवं ओएचएसएएस 18001 प्रमाणित कंपनी

सेवा मे/ ा०. महाप्रबंधक (योजना एवं परियोजना)/ General Manager (P&P), ई.सी.एल, सांकतोडिया / ECL, Sanctoria.

Ref. No. ECL:CS:3(314-C)/05



Eastern Coalfields Limited (A Subsidiary of Coal India Limited) Office of the Chairman-cum-Mg. Director Sanctoria, P.O. Disergarh-713333 Distt. West Burdwan (W.B.) Company Secretariat Telefax: 0341 - 2520546 E-mail: eclcos17a@gmail.com CIN-U10101WB1975GOI030295 Website: www.easterncoal.gov.in An ISO 9001, ISO 14001 & OHSAS 18001 Certified Company

महाप्रबंधक (यो, एंच परियो) विभाग G.M. (P&P) Depti.

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Pipel (Paret ) April 13H

Sub.: Minutes of the 314th Meeting of Board of Directors of ECL held on 4th July, 2018.

Reproduced below is the relevant extracts from the Minutes of the 314th Meeting of the Board of Directors of Eastern Coalfields Limited, held on 4th July, 2018 with regard to the following:

2nd RCE for Kalipahari (A) OC Patch by total outsourcing. "314.03(J)

General Manager (P&P) apprised the Board that the Kalipahari (A) OC patch is located in the Sripur area of Eastern Coalfields Limited. Estimated quantity of coal and volume of OB removal in the approved report was 3.20 L Te. and 21.60 L Cum respectively. However, till 2017-18 the OC patch has produced 0.82 L Te. of coal and 7.79 L Cum of OB. Hence, the balance reserve in the OC patch is 2.38 Lakh Te. of coal and 13.81 Lakh Cum of OB. Stripping ratio for the balance reserve is 5.80 Cum/Te. Initially, the Conceptual Report for the mine was prepared in January, 2010 and approved by ECL Board on its 233<sup>rd</sup> meeting held on 22.01.2010, with a provision of ₹ 1.32 Crore for land acquisition and a total capital investment of ₹ 3.18 Crore. After approval of the conceptual report by ECL Board, the Colliery Authority applied for acquisition of 44.46 acres of land (14.11 acres of Govt. vested land and 30.35 acres of Tenancy land) to L.A. Collector, Burdwan. The L.A. Collector intimated that the cost of acquiring 44.46 acres of land under the ACT would be ₹ 374.14 Lakh and demanded 50% of the cost i.e. ₹ 187.07 Lakh as advance. As the estimated land cost exceeded the capital provision of approved report, a Revised Conceptual Report was prepared in July, 2010 with increased Capital

The Revised Conceptual Report has been approved by ECL Board in its 240th provision. meeting held on 08.11.2010, with a provision of ₹ 3.74 Crore for land acquisition and a total capital investment of ₹ 5.61 Crore. However, due to inordinate delay under LA Act, ultimately, ECL had withdrawn that application in 2014 and decided to acquire the tenancy land by direct purchase. Meanwhile the total cost of land had been escalated to ₹ 10.10 Crore which includes ₹ 8.83 Crore for 14.11 acres of Govt. land only. Moreover, estimated capital outlay for other jobs had also increased due to time overrun and the total revised capital requirement had been estimated to be ₹ 15.42 Crore against the approved capital of ₹ 5.61 Crore. As the financial parameters considered in the Revised Conceptual Report of 2010 had undergone several changes, an RCE for Revised Conceptual Report of Kalipahari (A) OC Patch was prepared by the CMPDI in August, 2015. This RCE was approved by ECL Board in its 283rd meeting, held on 30th September, 2015. Subsequent to its approval, the revised scheme is being implemented by the area and in the process; the following capital expenditure has been incurred till date:

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es before departure. Segage is mandatory for all p

01.11	Particulars	Amount (₹ in Lakh)
SI. No.	Particulars	1032.00
1	Land Acquisition	
2	Garland drain	10.00
	Total	1042.00

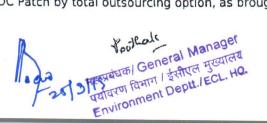
Working of the scheme involves diversion of two H.T. power lines (one 220KV and other 33 KV) belonging to DVC. Estimated capital provision in the approved RCE for diversion of those H.T lines was ₹ 400.00 lakh. Recently, DVC has submitted an estimate of ₹ 997.74 Lakh for diversion of those H.T. lines. Moreover, the total Capital expenditure involvement for 44.46 Acres of land has now been increased from ₹ 1010.00 lakh to ₹ 1098.00 lakh (including capital expenditure of ₹ 1032.00 Lakh already incurred). Thus the revised estimated capital requirement for land acquisition exceeds the total approved RCE capital of ₹ 10.10 Crore.

In view of the above, the present RCE for the approved revised scheme of Kalipahari (A) OC Patch has been prepared on the basis of information contained in the approved RCE, and other updated information. The salient features of the 2nd RCE and the approved RCE are as under:

SI. No.	Particulars	Approved RCE	Current RCE
1	Mineable Coal reserves (L Te.)	3.20	3.20
2	Total OB quantity (L. Cum)	21.60	21.60
3	Average Stripping Ratio (Cum/Te)	6.75	6.75
4	Life of Mine in years	2	2
5	Declared Geological GCV grade of Coal	"G4"	"G4"
6	Total capital (₹ Crore)	15.42	22.31
7	Total Requirement of Land (Acre)	57.29	57.29
8	Quantity of land to be acquired (Acre)	44.46	44.46
9	Total capital For Land (₹ Crore)	10.10	10.98
10	Capital For Diversion of H.T Power line (₹ Lakh)	400.00	997.74
11	Max. No. of Employment to be given (No.)	15	15
12	Requirement of Manpower (No.)	22	22
13	Cost of production (₹/Te)	1987.90	1804.90
14	Average selling price of coal (₹/Te)	3451.50	3029.14
15	Profit (₹/Te)	1463.60	1224.24
16	Total expenditure during whole life (₹ Crore)	63.61	57.76
17	Total sales realization (₹ Crore)	110.45	96.93
18	Net profit during total life (₹ Crore)	46.84	39.18
19	Mine Closure cost (₹ Crore)	1.965	1.965
20	Reference date	August, 2015	May, 2018

The Sub-Committee of ECL Board for "Evaluation, Appraisal and Approval of Projects" in its 36th Meeting, held on 25.05.2018 in Kolkata, recommended the 2nd RCE of Kalipahari (A) OC Patch by total outsourcing for placing before the ECL Board for consideration and accord of approval.

- (ii) To a query regarding the reason for increase in capital cost, he apprised the Board that the capital cost has mainly increased due to cost involved in diversion of two H.T. power lines (one 220KV and other 33 KV) belonging to DVC. Estimated capital provision in the approved RCE for diversion of those H.T lines was ₹ 400.00 lakh. However, recently, DVC has submitted an estimate of ₹ 997.74 Lakh for diversion of those H.T. lines. Moreover, the total Capital expenditure involvement for 44.46 Acres of land has now been increased from ₹ 1010.00 lakh to ₹ 1098.00 lakh (including capital expenditure of ₹ 1032.00 Lakh already incurred).
- (iii) In view of the above, Board after detailed deliberation approved the 2nd RCE of Kalipahari (A) OC Patch by total outsourcing option, as brought out in the agenda.



314.03(K)

Project Report of Tilaboni UG Mine, March 2018, Capacity: 1.86 MTY, Total Capital: ₹ 1416.249 Crore (Existing Capital: ₹ 25.236 Crore & Additional Capital: ₹ 1391.013 Crore) in Risk-Gain Sharing Option & ₹ 941.853 Crore (Existing Capital: ₹ 25.236 Crore & Additional Capital: ₹ 916.617 Crore) in Equipment Hiring Option.

General Manager (P&P) apprised the Board that Project Report of Tilaboni UG mine (1.86 MTY) (January, 2016) was placed in 286th meeting of ECL Board held on 23.02 2016 ECL parameters of \$\circ\$ 23.02.2016. ECL Board approved the PR in Risk-Gain option with capital investment of CIL 1177.44 Crore and recommended for sending in ESC of CIL Board for final approval of CIL Board. The control of the Board of the control of the Board of the control of the Board. Board. The coal price was revised w.e.f. 30.05.2016. CIL advised to recalculate the economics with new sale price. As IRR was below 12% in Risk-Gain option with new sale price at 95% price at 85% capacity utilization, CIL advised to prepare UCE. Accordingly, the Project Report of Tilahari 110 atilization. Report of Tilaboni UG Mine (September, 2017), Capacity: 1.86 MTY, Total Capital: ₹ 1301.93 Crore. (Risk-Gain Sharing Option) & ₹ 836.45 Crore (Equipment Hiring Option) was formulated. Planning Committee meeting was held on 17.10.2017. After incorporating the committee meeting was held on 17.10.2017. incorporating the suggestions of Planning Committee, Project Report of Tilaboni UG Mine (March 2018) Consider the State of Planning Committee, Project Report of Tilaboni UG Mine (March, 2018) Capacity: 1.86 MTY, Total Capital: 1416.249 Crore (Existing Capital: ₹ 25.236 Crore & Additional Capital: ₹ 1391.013 Crore) in Risk-Gain option and ₹ 941.853 Crore (Existing Capital: ₹ 25.236 Crore & Additional Capital: ₹ 916.617 Crore) in Crore (Existing Capital: ₹ 25.236 Crore & Additional Capital: ₹ 916.617 Crore) in Equipment Hiring option has been submitted. This PR has been formulated for total area of 10.76 ca. the Combined block Tilphoni St. Tilphoni Extension block). The salient of 10.76 sq. km (combined block - Tilaboni & Tilaboni Extension block). The salient features of the Recast Project Report of Tilaboni UG Mine are appended below:

eatur	es of the Recast Project Repor	Quantity/Value
SI. No.	Particulars	20 2020 MT)
1.	Extractable Reserve	47.0390 MT (Mine 1: 26.7360 MT & Mine 2: 20.3030 MT)  1.86 MTY by introducing 4set of Continuous Miners two sets  1.86 MTY by introducing 4set of Continuous Miners two sets
2.	Capacity & Production Parameters	1.86 MTY by introducing 4set of Continuous Miners 1. each in Mine 1 Mine 2 and two heightening districts in Mine 1. Degree II, > 25 years
3.	Degree of gassiness & Mine IIIe	7th year
4.	year of achieving target production	2 1 ) C. 9. 99 (Equipment Hiring)
5.	Overall OMS	5.90(Risk-Gain) & 8.86 (Equipment Hiring) 1203(Risk-Gain) & 799 (Equipment Hiring)
6.	Actual requirement of manpower	904 (UG: 754; SF: 150)
7.	Existing manpower(as on 01-03-18)	G-4 to G-6 i) Total land involved: 869 Ha out of which 433 Ha is outside
8.	Average grade of coal	i) Total land involved : 869 Ha out of the
9.	Land Details	of leasehold of ECL ii) Balance land to be possessed/transfer: iii) Balance land}- 713.92 Ha (For Risk –Gain) (a)Tenancy land}- 711.92 Ha (For Equipment Hiring)  /b) Forest land – 38.44 Ha
10.	Employment to be given (Max.)	
11.	Rehabilitation	is has been calculated on the basis of year wise
1.1.		has been calculated oil the bost

Weighted Average Selling price has been calculated on the basis of year wise overall GCV band up to 25th year of production as per production schedule. The weighted Average Selling price comes ₹ 2944.04/Te.

The major financial parameters of the project are appended below:

The major 1	inanciai	parameters of	ering Option	Equipm	ent Hiring Option
Particulars	Unit	At 100%	naring Option At 85% capacity utilization	At 100% capacity utilization	At 85% capacity utilization
Cost of	₹/Te	2,539.29		2,328.87	2,519.93
Production	ction			2944.04	
Selling Price	₹/Te	404.75	136.83	615.17	424.11
Profit/Loss	₹/Te %	11.07%		19.88%	14.03%
IRR .					

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The Financial Appraisal has been carried out by M/S IDCS Nagpur. As per Financial Appraisal Report, the IRR of this PR in Risk-Gain Sharing option is 11.07% and 5.85% respectively for 100% & 85% Capacity utilization & IRR in Equipment Hiring option is 19.88% and 14.03% respectively for 100% & 85% Capacity utilization. IRR under Equipment Hiring option only is more than 12% both at 100% & 85% Capacity utilization which is benchmark for approval of project report. M/S IDCS Nagpur recommended that the project seems viable in Equipment Hiring option. As per Financial Appraisal Report of Tilaboni UG mine, in Risk-Gain Sharing option, the project will incur profit of ₹ 404.75/Te & ₹ 136.83/Te at 100% & 85% Capacity utilization while IRR will be 11.07% & 5.85% only at 100% & 85% Capacity utilization respectively.

In case of Risk-Gain sharing option, Financial IRR is below 12% both at 100% & 85% capacity utilization, so Sensitivity analysis has been worked out with different variables at the base cases in Equipment Hiring option only. Project IRR is highly sensitive to selling price changes. It indicates that the Project is highly sensitive with selling price & with decrease in selling price beyond 10% from the base case; the Project IRR comes below 12% in Equipment Hiring option also.

Project Report of Tilaboni UG Mine, March, 2018, Capacity: 1.86 MTY, [Total Capital: ₹ 1416.249 Crore (Existing Capital: ₹ 25.236 Crore & Additional Capital: ₹ 1391.013 Crore) in Risk-Gain Sharing Option & ₹ 941.853 Crore (Existing Capital: ₹ 25.236 Crore & Additional Capital: ₹ 916.617 Crore) in Equipment Hiring Option, was placed before the Sub-Committee of ECL Board for "Evaluation, Appraisal and Approval of Projects" in its 36th meeting held on 25.05.2018. The Sub-Committee approved the proposal in Equipment Hiring option and recommended to place the Proposal before ECL Board for approval with recommendation to obtain final approval from CIL Board through ESC of CIL Board.

- To a query regarding the cost of production, he apprised the Board that at 100% production level under Risk-Gain sharing option and Equipment hiring option, the cost of production is ₹ 2539.29 per tonne and ₹ 2328.87 per tonne respectively. At 85% production level under Risk-Gain sharing option and Equipment hiring option, the cost of production is ₹ 2807.21 per tonne and ₹ 2519.93 per tonne respectively.
- In view of the above, Board after detailed deliberation approved the Project Report of Tilaboni UG Mine, March, 2018, Capacity: 1.86 MTY, along with Financial Appraisal report in Equipment Hiring Option with Total Capital of ₹ 941.853 Crore (Existing Capital: ₹ 25.236 Crore & Additional Capital: ₹ 916.617 Crore) for forwarding the same to CIL Board for final approval through Empowered Sub-Committee (ESC) of CIL Board.

314.04(D) Status report of Closure of unsafe and unviable UG mines of ECL.

Board noted the information as brought out in the agenda." (i)

Original papers/file(s) on the above proposals bearing Items No. 314.03(J), 314.03(K) & 314.04(D) were delivered to your Department on 03.07.2018.

This is for your information and necessary action, please.

भवदीय/Yours faithfully,

(रामबाब् पाठक)

(Rambabu Pathak)

उप-प्रबंधक (वित)/कंपनी सचिव Deputy Manager (Finance)/Company Secretary

महाप्रबंधक/ General Manager पर्यावरण विभाग / ईसीएल मुख्यालय Environment Deptt./ECL. HQ.