(11)

CCL

सेंट्रल कोल्फील्डस लिमिटेड

(एक मिनिरत्न कम्पनी)
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No. CGM(P+P)/10/2172-73
dt. 30/8/10.

सेवा में,

महाप्रबंधक (उत्तर कर्णपुरा क्षेत्र),
सेंट्रल कोल्फील्डस लिमिटेड,
रांची.

विषय: **In-Principle Approval of Extension Project Report of KDH OCP (Normative capacity 4.5 MTY)**

महाशय,

The proposals of In-Principle Approval of Extension Project Report of KDH OCP (Normative capacity 4.5 MTY) was approved in the 370th meeting of Board of Directors of CCL held on 19.08.2010. (Photocopy of approval of CCL Board enclosed for ready reference).

It is requested that the activities of the proposal may kindly be started at your end.

PO BDH / SO(KP) / R66 / 3/9

भवदीय,
पी. के. गुहा
30.08.10
मुख्य महाप्रबंधक, (यो एवम परि0)

संल्गन: यथोक्त
प्रतिलिपी :
निदेशक तकनिकी(संचालन) - सूचनार्थ

CENTRAL COALFIELDS LIMITED
DARBHANGA HOUSE: RANCHI

Sub: Forwarding Minutes of the 370th (No.6 of 2010) Meeting of the Board of Directors held on 19.08.2010.

Extracts from the minutes of the above meeting, in respect of following item, is appended below:

Item No.4(1): Proposal seeking 1st stage 'In-Principle' approval of Extension Project Report of KDH OCP (Normative capacity 4.5 MTY).

The Board noted that KDH OC RPR (4.5 MTY) was sanctioned by Govt. vide letter no. No.43011/23/2000-CPAM, dated 21.11.2001 for a capital investment of Rs.316.17 crore, which was also completion cost, at February, 2001 price level. The project was completed in March'2002 and the completion report was approved by CCL Board in its 304th meeting held on 19.04.2002.

The Board further noted that the present sanctioned KDH Expansion OCP is nearing exhaustion and the mine is likely to be exhausted in 3-4 years. The mine is required to be extended towards the dip side property of the KD South Geological Block and a part of Karkatta Geological Block (up to Kendua Nala in the West) as brought out in the Extension proposal.

The proposed extension will sustain the level of production from the existing KDH OCP for next 25 years and will fulfill the demand of power grade coal from N.K. Coalfield, which will help to reduce, to some extent, the gap in demand and production of CCL for XI & XII plan.

It was viewed that KDH Extension OC was placed in the 15th (No.1 of 2010) meeting of the ESC of Directors held on 25.02.2010. The ESC recommended the proposed Extension of KDH OC (Normative capacity 4.5 MTY) with an additional Capital investment of Rs. 201.13 Crore and at a Financial IRR of 37.80% and 24.33% at 100% and 85% rated output respectively. The ESC further directed to place the same to the Board for consideration and approval.

1. As per the new policy for final approval of projects shall be effective only after grant of all clearances was issued by CIL. In 253rd meeting of Board of Directors of Coal India Limited held on 22.12.2009, two stage approval procedure, for approval of the projects, within delegated powers of the respective Boards was approved. Further, the same was discussed in 256th meeting of the Board of Directors of Coal India Limited held on 03.5.2010. The salient points of the deliberations are as follows:

- The First stage being the "In-Principle" Approval of PR to facilitate application of for Environmental and Forestry clearances and the Second Stage being the Final Approval of the investment decision for implementation of the Project after obtaining such clearances.
- In case of proposals of Subsidiary Companies, requiring CIL Board's approval, recommendation of the Subsidiary Company Board may be [illegible] Approval of the PR for processing of application for above clearance.

CGM(P&P) 08
26/8/10
30

CA

Sr. Scr(?), CGM(P&P) - Copies to RD-R/III, GM(NK), CGM(X), CGM(E&F), CGM(CMC), GM(L&R), GM(E&M), GM(PMD) CIL
undersigned

Board file
KDH file

28/08/10

2. The total extractable reserves have been estimated as 107.15Mtes corresponding to a volume of OBR of 164.99 Mcum at an average stripping ratio of 1.54 cum/te.

3. The capital requirements are given below:

Particulars	Unit	Amount
Additional capital for sanction	Rs. Crs	219.91
Actual capital expenditure upto 31.3.09 considered	Rs. Crs	268.03
Total estimated project capital	Rs. Crs	487.94
Capital outlay per tonne of annual output	Rs/t	1084.31
Capital requirement beyond 4th year	Rs. Crs	15.43

4. Phasing of additional capital requirement in Rs. Lakhs is:

	1	2	3	4	Total
Additional capital	7142.86	7380.40	7170.58	297.05	21990.89
Production Mty	4.50	4.50	4.50	4.50	

5. Capital requirement beyond 4th year is for:

(Rs. Lakh)

Electricals	0.59
Rehabilitation, Compensatory Afforestation etc.	14.84
Total	15.43

The additional estimated capital investment (upto 4th year) for KDH OCP has been estimated as Rs.219.91 Crore. The estimated capital investment (beyond target year) is Rs.15.43 Crore

Keeping in view of the above, after detailed deliberation, the Board approved the proposal for 1st stage 'In-Principle' approval for Extension Project Report of KDH OCP (Normative capacity 4.5 MTY) as brought out in the agenda note.

It is requested kindly to take necessary action on the decision, wherever necessary, under intimation to this office.

25/8/1

(C.V.N. Gangaram)
Company Secretary

CGM(P&P)

U.O.No.CS/BM/370/2010/ 1113 Dated: 25.08.2010

SUMMARISED DATA

Sl. No.	Particulars	Unit	Value
A.	GENERAL		
1	Name of Project		KDH OCP (4.5MTY)
2	Type of Project		Existing
3	Name of Area / Company		N.K. Area/Central Coal Field Ltd
4	Nearest Railway Station from project	Name km	Khalari Railway Station 1km
5	Nearest National / State Highway / Approach road	Name	State Highway 7
B.	GEOLOGICAL		
1	Name of geological blocks considered	Name	K.D South & Karkata
2	Area of the geological blocks	sq. km	1.45 Sq. km+.715Km
3	Borehole Density within blocks	BHs / sq.km	18.6
4	Description of all coal seams within block		

Stratigraphic Sequence	*Thickness (m)*		*No. of borehole intersections*	*Net Geological Reserves (MT)*	*Remarks*
	Min.	*Max.*			
.5	5.25	5.85	4	----	Reserve not considered
'arting	28.79	33.20			
4	2.95	5.70	7	2.82	
arting	26.79	42.91			
[illegible]	0.23	1.45	8	1.42	
arting	6.86	10.00			
:2	1.65	7.04	10	6.38	
rting	2.43	18.00			
[illegible]	1.74	4.53	11	4.13	
arting	3.42	14.61			
arkata	2.12	6.15	9	4.75	
'arting	17.35	40.90			
isrampur	1.60	6.15	23	24.07	
arting	5.58	22.87			
ukbuka	10.12	22.38	25	40.70	
'arting	25.46	34.90			
'arting (Between akra Top and ukbuka)	16.25	29.54			

Dakra Top	0.72	11.89		21.33	
Parting	1.44	7.24			
Dakra Bot	15.57	21.37		59.32	
TOTAL				164.93	

C.	**TECHNICAL**		
1	Area of the proposed mine block	sq. km	1.75
2	Borehole density within mine area	BHs/sq. km	16
3	Mine parameters:		
	Extent along strike (Avg.)	km	1.43
	Extent along dip (Avg.)	km	0.75
4	Description of coal seams proposed to be worked along with the parting details		

Name of seam	*Thickness range considered (m)*		*Av. Thickness / Parting Thickness (m)*	*Av. Grade (U.H.V.) K. Cal/Kg*	*Av. gradient (deg)*	*Mineable Reserves (Mt)*	*Volume of OB (Mcum)*
	Min	*Max*					
Top OB			34.10				40.77
K3	1.00	1.45	1.05	2830	6-8	0.84	
Parting	5.86	10.00	8.90				7.34
K2	1.65	7.04	4.88	3905-4140	6-8	4.49	
Parting	2.43	18.00	6.60				3.73
K1	1.74	4.53	2.25	4185-5215	6-8	2.45	
Parting	3.42	14.61	8.10				8.01
Karkata	2.12	6.15	4.37	3670-4650	6-8	4.16	
Parting	17.35	40.90	23.00				22.72
Bisrampur	1.60	6.15	4.26	2995-4290	6-8	14.54	
Parting	5.58	22.87	13.00				17.94
Bukbuka Top	0.82	2.00	1.00	2995-4290	6-8	4.80	
Parting			0.50				9.61
Bukbuka Bottom	9.30	20.40	16.5	2995-4290	6-8	30.77	
Parting			21.40				36.59
Upper Dakra	1.00	11.89	4.93	3695-4515	6-8	7.81	
Parting	1.44	7.24	2.60				18.28
Lower Dakra	15.57	21.37	20.03	2550-3545	6-8	37.25	
Total Coal OB						**107.15**	**164.99**

5	Av. Stripping Ratio	m^3/t	**1.54**
6	Method of Mining		Opencast by Shovel-Dumper Combination

7	Target Output Normative production capacity (at 100%) Peak production capacity (at 115%) Production capacity (at 85%)	 Mt Mt Mt	 4.50 5.175 3.825
8	Year of achieving Target Production (from zero date)		1st Year
9	Year of start of Internal Dumping		1st Year
10	Production Phasing (from zero date upto target year)	Mt	

Year	Year 1	Year 2	Year 3	Year 4
Coal (Mt)	4.50	4.50	4.50	4.50
OB (Mcum)	7.0	7.0	7.0	7.0

11	Total Mine Life (at Norm. production capcity) • Pre-construction period Construction period Production build-up period Production period Tapering / mine closure period	Years Years Years Years Years Years	25 NA Nil Nil 22 3
12	Major HEMM Deployed for Coal	Capacity	(Up to Tgt Yr)
	Electric Rope Shovel	(5 Cum)	3
	Rear Dumper	(50/60T)	19
	Drill	(160 mm)	4
	Dozer	(410 HP)	4
13	Major HEMM Deployed for OB (Up to Tgt Yr)	Capacity	(Up to Tgt Yr)
	Electric Rope Shovel	(10 Cum)	3
	Electric Rope Shovel	(5 Cum)	1
	Rear Dumper	(100T)	23
	Rear Dumper	(60T)	6
	Elec. RBH Drill	(250 mm)	4
	Dozer	(410 HP)	8
14	Total Manpower (Up to Tgt Yr) Existing Additional	 Nos. Nos.	(Up to Target Year) 1023 Nil
15	Overall Output per manshift (OMS)	Tonnes	Main Variant 16.66
16	Seam-wise weighted average grade of coal (non-coking/coking)		Grade 'E'
17	Presence of Major Surface Constraints (nallas, road, power line, etc.)	(type)	Sonadoba Nala in Eastern side, Kendua nala in western side Jehlitand and Barkitand village

18	.	Coal Transport within the mine (In-pit belt conveying system or by Truck)		By Dumpers
19		Surface Coal Transport to Siding/Despatch Point and Mode of Despatch		By Truck
20		Any Railway Siding and distance		Dakra Siding at 1.5km from Project
21		Name of any Specific Customer/Industry		-
D.		**ENVIRONMENTAL & OTHERS**		
1		Civil Construction		
		Residential houses	Nos.	563
		Housing satisfaction	%	55
2		Water Demand	Klpd	
		Colony		513.75
		Industrial		773.32
3		Total Land required	Ha	195.96
		Forest land	Ha	101.06
		GMK Land	Ha	25.66
		Tenancy land	Ha	69.24
4		Land to be acquired for external dumping	Ha	Nil
5		Net Present Value of Forest Land	Rs.Lakhs/Ha	7.84
		Total Area	Ha	101.06
		Total Value	Rs.Lakhs	792.31
6		Habitation & Rehabilitation		
		No. of villages within mine boundary	Nos.	2
		No. of PAFs to be rehabilitated		800
7		Cost of land & Rehabilitation		
		Total Cost	Rs. crores	16.05
		R&R only	Rs. lakhs	800.00
8		Total EMP Capital	Rs. crores	20.67
9		Average annual rainfall	mm	1250
10		Make of Water on the day of Maxm Rain fall	cum/day	208310
11		Total installed pumping capacity	lps	530
12		Drainage of the Area (Name of river/nalla)		Through Sonadoba Nala & Kendua Nala to Damodar River
13		Any proposed diversion of nala or power line		None
E.		**FINANCIAL**		Coal & OB Both Departmental
1		Total Capital Investment	Rs. crores	
			Existing	268.03
			Additional	207.27
		Total		475.30

2	Specific Investment	Rs. / tonne	
		Total	1056.23
		Additional	460.61
		Rs./m3	
		Total	679.01
		Additional	296.10
3	Total Capital Investment on P&M	Rs. crores	
		Existing	228.55
		Additional	140.84
4	Specific Investment on P&M	Rs. / tonne	
		Total	820.86
		Additional	312.97
5	Capital requirement upto target year	Rs. crores	465.71
6	Year of opening of Revenue account (from zero date)		1st year
7	Earnings per manshift (EMS) (target year)	Rs.	1548.28
8	Estimated Cost of Production	Rs. / tonne	
		At 100% production level	464.06
		At 85% production level	531.74
9	Estimated average selling price	Rs. / tonne	773.00
10	Estimated Profit	Rs. / tonne	
		At 100% production level	308.94
		At 85% production level	241.26
11	Financial Internal rate of return (FIRR)	%	
		At 100% production level	34.21%
		At 85% production level	22.01%
12	Economic rate of return (only for projects to be approved by Govt.)	%	
		At 100% production level	43.16%
		At 85% production level	29.87%

13	Desired av. Selling Price to yield 12% FIRR	Rs. / tonne	
	At 100% production level		587.75
	At 85% production level		677.53
14	Break-even point		
	Production	Mty	2.49
	Production level	%	55.39
15	Cost of Outsourcing (average)		
	OB	Rs/m3	
	Coal	Rs/tonne	
16	Mine Closure Cost (for corpus fund) / te.		6.89
17	Expected Completion Capital	Rs. crores	502.17
18	Financial IRR for completion cost	%	32.54%
19	Economic IRR for completion cost	%	41.52%