BRIEF SUMMARY OF UTKAL D & E OPEN CAST COAL MINE PROJECT (CAPACITY – 4.0 MTPA)

INTRODUCTION

The National Aluminium Company (NALCO) is a Navratna Central Public Sector Enterprise (CPSE) under Ministry of Mines, Govt. of India. It was established on 7th January, 1981, with its registered office at Bhubaneswar. The company is a group 'A' CPSE having integrated and diversified operations in mining, metal and power with sales turnover of Rs.7771 crore in financial year 2014-15. Presently Govt. of India holds 80.93% equity of NALCO.

The Utkal-D&E Coal Block has been allotted to National Aluminum Company Limited for captive use by MoC vide allotment no. F.No.103/34/2015/NA dated 2nd May, 2016. Utkal-D and Utkal-E blocks area are located in the south central part of Talcher coalfield, Odisha. The coalfield spans over an area of about 1860 sq.km and lies in between latitudes 20°53'00" & 21°12'00" North and longitudes 84°20'00" & 85°23'00". Utkal-D is the eastern half of newly formed Utkal-D&E coal block and Utkal-E is the western half approximately.

LOCATION AND COMMUNICATION

Utkal-D & E block is situated in the south-central part of the Talcher Coalfield. Some particulars are given below:

Coalfield	Talcher Coalfield	
Company	NALCO	
Tahsil	Chhendipada	
District	Angul	
Latitudes	20°56'33″ to 20°58'58" N	
Longitudes	84°55'49" to 84°57'18" E	
Toposheet No.	73 D/13 (RF 1:50,000)	
Special Toposheet no.	L2 & A2 (RF 1:10,000)	

The Durgapur-Raijharan forest road passes at a distance of about 100 m south of south-east corner of the block. This is a narrow morrum road joining State Highway-63, 2.1 km north-east at Raijharan village. State Highway-63 is all weather widened and strengthened road connecting Tahsil town Chhendipada to District HQ Angul.

National Highway 55 (Bhubaneswar-Sambalpur) at Angul is 20 km from Raijharan village. Chhendipada Tahsil HQ is around 21 km north-west of the block on State Highway-63. Nearest rail head is Angul at a distance of about 26 km on Sambalpur-Talcher-Bhubaneswar rail line of East Coast Railway. Angul is well connected with State capital Bhubaneswar by rail and road which is at a distance of about 170 km. Bhubaneswar has international airport.

GEO-MINING CHARACTERISTICS:

SI. No.	Particulars	Unit	Value
1.	Quarry floor area	Ha	227.36
2.	Quarry surface area	Ha	394.51
3.	Mineable reserve	Mt	159.52
4.	Overburden	Mcum	396.59
5.	Stripping ratio	cum/t	2.49
6.	No. of seams/sections*	No.	15
7.	Capacity	Mty	4.00
8.	Life	Years	43
9.	Average seam gradient	Degrees	5.86
10.	Strike length (along floor)		
	Maximum	m	2097
	Minimum	m	1913
11.	Strike length (along surface)		
	Maximum	m	2451
	Minimum	m	2541
12.	Quarry depth		
	Maximum	m	242.0
	Minimum	m	99.50
13.	Quarry perimeter	m	8347
14.	Dip-rise length		
	Along floor	m	1159
	Along surface	m	1593

^{*} including bottom and top sections of seams

Blast free techniques have been proposed for production of coal using Surface Miner and Shovel-dumper system is proposed for excavation of overburden.

The total land requirement for the project is 885.21 Ha out of which mining lease area is 842.96 Ha.