

## FORM - A

Form for seeking prior approval of Central Government under section 2 of the Forest(Conservation) Act, 1980 for Diversion of forest area

### PART - I

(To be filled up by User Agency)

#### A. General Details

Proposal No.: 41142/2019  
State Serial No.: OR-069/2019  
Date: 21/9/2019  
ANO, Nodal Wing  
O/o-PCCF, Odisha

##### A-1. Project Details

(i). Proposal No. : FP/OR/MIN/41142/2019

(ii). Name of Project for which Forest Land is required : Utkal-E Coal Mines

(iii). Short narrative of the proposal and Project/scheme for which the forest land is required : Nalco is the first company in Aluminium sector in the country to venture into international market in a big way with London Metal Exchange (LME) registration since May, 1989. The company is listed at National Stock Exchange (NSE) since 1999. All the manufacturing units and the port facility of the c

(iv). State : Orissa

(v). Category of the Proposal : Mining

(vi). Shape of forest land proposed to be diverted : Non Linear

(vii). Estimated cost of the Project(Rupees in lacs) : 33700

(viii). Area of forest land proposed for diversion(in ha.): 169.1779 ✓

(ix). Non-forest land required for this project(in ha.): 354.5546 ✓

(x). Total period for which the forest land is proposed to be diverted(in years): NIL

##### A-2. Details of User Agency

(i). Name : NALCO

(ii). Address1 : NALCO Bhawan, P-1, Nayapalli

(iii). Address2 : P.O.-RRL, Bhubaneswar

(iv). State : Orissa

(v). District : Anugul

(vi). Pin : 751013

एस.के. पटेल / S. K. PATEL  
प्रशासनिक (तकनीकी) / General Manager (Technical)  
नेशनल एल्युमिनियम कम्पनी लिमिटेड  
National Aluminium Company Ltd.  
भुवनेश्वर / Bhubaneswar-751061

(viii). Email address : gm\_uecb@nalcoindia.co.in

(ix). Landline Telephone No. : 6764-220323

(x). Fax No. : 6764-220824

(xi). Mobile No. : 9437072198

(xii). Website (if any) : www.nalcoindia.com

(xiii). Legal status of User Agency : Central PSU

A-3. Details of Person Making Application

(i). First Name: Sanjay

(ii). Middle Name: Krishna

(iii). Last Name: Patel

(iv). Gender: Male

(v). Designation: GeneralManagerTechnical

(vi). Address 1: NALCO Bhawan, P-1, Nayapalli

(vii). Address 2: P.O.-RRL, Bhubaneswar

(viii). State: Orissa

(ix). District: Khordha

(x). Tehsil: Khordha

(xi). Pin: 751013

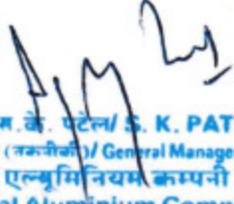
(xii). Landmark: NIL

(xiii). Email Address: sanjay.patel@nalcoindia.co.in

(xiv). Landline Telephone No.: 674-2300633

(xv). Fax No.: NIL

(xvi). Mobile No.: 9437029513

  
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make application on behalf of the User Agency:

## B. Details of land required for the Project

B-1. Details of proposal seeking prior approval of Central Government under the Act for diversion of forest land for the Project already submitted in the past

List of proposal submitted in Past							
S.no	Proposal Status.	Proposal No.	Moef File No.	Area Proposed for Diversion(Ha.)	Area Diverted(Ha.)	Date of In-Principle Approval	Date of Final Approval
NIL							

B-2. Details of forest land proposed to be diverted

B-2.1 Details of Divisions involved

Details of Divisions involved			
S.no	Division Name	Forest Land(ha.)	Non-Forest Land(ha.)
1.	Angul	169.1779	354.5546
Total		169.1779	354.5546

B-2.2 Details of Districts involved

District wise breakup			
S.no	District Name	Forest Land(ha.)	Non-Forest Land(ha.)
1.	Angul	169.1779	354.5546
Total		169.1779	354.5546

B-2.3 Village wise breakup

Villages wise breakup			
S.no	Village	Forest Land(ha.)	Non-Forest Land(ha.)
1	Nandichhod	107.9416	174.5317
2	Kundajhari Jungle	41.4941	33.2344
3	Kosala	0	16.892
4	Korada	0	119.8067
5	Gopinathpur Jungle	19.7422	10.0898
Total		169.1779	354.5546

B-2.4 Component wise breakup

Component wise breakup			
S.no	Component	Forest Land(ha.)	Non-Forest Land(ha.)
1	Mining area	169.1779	354.5546
Total		169.1779	354.5546

C. Maps of forest land proposed to be diverted

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पहापरबंधक (तकनीकी) / General Manager (Technical)  
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National Aluminium Company Ltd.  
751061

(i). Area of forest land proposed to be diverted(in ha.) : 169.1779

(ii). Nature of the Project: Non Linear

(a). No. of patches : One

Patch wise details		
Patch No.	Area of Patch(in ha.)	Kml File of PatchesTo view KML file on google the same may be downloaded and then open if in google earth install in your computer.
1.	169.1779	 <a href="#">View File</a>

(iii). Copy of Survey of India Toposheet indicating boundary of forest land proposed to be diverted: 

(iv). Scanned copy of the Geo-referenced map of the forest land proposed to be diverted prepared by using GPS or Total Station: 

#### D. Justification for locating the Project in forest land and details of alternatives examined:

(i). Copy of note containing justification for locating the Project in forest land: 

#### E. Employment likely to be generated

(i). Whether the Project is likely to generate employment?: Yes

(ii). Permanent/Regular Employment(Number of persons): 50

(iii). Temporary Employment(Number of person-days): 200

#### F. Displacement of People due to the Project, if any

(i). Whether Project involves displacement?: No

#### G. Details of Cost-Benefit analysis for the Project

(i). Whether the Project requires Cost-Benefit analysis?: Yes

(a). Copy of Cost-Benefit analysis: 

#### H. Status of Environmental Clearance

(i). Whether the Project requires Clearance under the Environment (Protection) Act 1986 ? : No

#### I. Status of Wildlfe Clearance

  
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(i). Whether the Project or a part thereof is located in any Protected Area or their Eco sensitive zone? : No

J. Applicability of special provisions governing Scheduled Areas

(i). Whether the Project or a part thereof is located in a Scheduled Area? : No

K. Status of settlement of rights under the Forest Rights Act, 2006 on the forest land proposed to be diverted

(i). Whether the process for settlement of Rights under the Forest Rights Acts 2006 on the forest land proposed to be diverted has been completed? : No

L. Details of land identified for Compensatory Afforestation

(i). Whether non-forest or Revenue forest land is required to be provided by User Agency?: Not Applicable

(ii). Whether the area of non-forest land or Revenue forest land required to be provided by User Agency for raising Compensatory Afforestation is less than area of forest land proposed to be diverted?: Not Applicable

(iii) . Reason for not providing Non-Forest Land: Not Applicable

M. Mining Details

M-1. Details of Mineral Concessions

(i). Whether the forest land is aquired under Coal Bearing Areas Act: Yes

(a). Total area of the mining lease(in ha.): 523.7325

(b). Area of forest land located in the mining lease(in ha.): 169.1779

M-2. Details of Mining Plan

(i). Date of approval of mining plan: 31 Jul 2006

(ii). Approval authority: CMPDI, Ministry of Coal, GoI

(iii). Copy of approval of mining plan: 

(iv). Copy of approved mining plan: 

(v). Nature of mining (underground/opencast): Opencast

(vi). Copy of the detailed land use plan in 1:4,000 scale prepared by using GPS or Total Station :

  
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नेशनल एल्युमिनियम कम्पनी लिमिटेड

View file

Details of prospecting undertaken to assess mineral reserves

(i). Whether detailed prospecting to assess mineral reserve in the lease has been undertaken: No

M-4. Details of extension (if any) of original prospecting licence issued in the past

(i). Whether detailed prospecting to assess mineral reserve in the lease has been undertaken: No

M-5. Brief details of prospecting activities undertaken in the mining lease :

(i). Detail of prospecting activity under taken in the mining lease: New Coal Block Lease

M-5.1 Details of bore holes drilled for prospecting :

Bore holes drilled for prospecting				
S.no	No. of Bore holes (in forest land)	Diameters(in inch.) forest land	No. of Bore holes (in non-forest land)	Diameters(in inch.) non-forest land
1	0	0	0	0

M-5.2 Estimated Reserve along with accuracy and confidence level

Estimated Reserve along with accuracy and confidence level						
Minerals	Estimated Reserve (million tones)	% accuracy (+ -)	% confidence level	Estimated Reserve (million tones)	% accuracy (+ -)	Estimated mineral reserve at the end of mining lease(million tons.)
<b>NIL</b>						

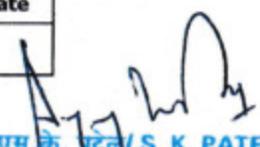
M-6. Details of approval under the Forest (Consevation) Act,1980 obtained for undertaking prospecting activities in the forest land located in the mining lease

(i).Whether approval under the Forest (Conservation) Act, 1980 for undertaking prospecting activities in the forest land located in the mining lease have been obtained No

Details of approval under the Forest(Consevation) Act,1980					
S.no	MoEF File No	Date of approval	Area of forest land diverted(in ha.)	From Date	To Date
<b>NIL</b>					

M-7. Mineral wise details

(i). No. of minerals: One

  
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Mineral wise details						
Minerals	Estimated reserve in non forest land(million tons.)	Estimated reserve in forest land(million tons.)	Estimated annual extraction(million tons.)	Estimated life of mine(Yrs.)	Total estimated extraction during mining lease	Estimated mineral reserve at the end of mining
<b>NIL</b>						

M-7.1 Proposed use of the minerals proposed to be raised from the mining lease

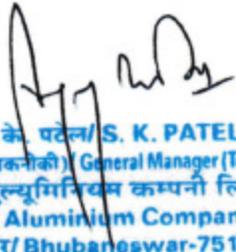
(i). Proposed use of the minerals proposed to be raised from the mining lease: Captive

(a). Copy note containing details of the linked end-use Project: 

(ii). Copy note containing details of the plan for the transportation of the minerals proposed to be raised from the mining lease: 

Additional information Details

Documents		
S.No	Documents	Remarks
1		Tree enumeration.

  
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 National Aluminium Company Ltd.  
 भुवनेश्वर/ Bhubaneswar-751061

  
 Divisional Forest Officer  
 Angul, Division

## PROJECT AT A GLANCE

Part-A

1. National Aluminium Company Limited (NALCO) is operating a multi-locational Bauxite Mines-Alumina-Aluminium complex along with the Captive Power Plant, in the state of Orissa. The plant was commissioned in 1987. A major expansion programme (1st phase) was started in 1997/1998 and the same has already been completed by end 2003.

The plant capacity and location of various units of the complex after Phase-I expansions are as under:

Production	Unit	2015-16	2016-17	2017-18
Bauxite	MT	63,40,142	68,25,000	70,25,109
Alumina Hydrate	MT	19,53,000	21,00,100	21,05,500
Aluminium	MT	3,72,183	3,87,422	4,25,515
Thermal Power	MU	5,841	6,066	6,547
Wind Power	MU	156	198	243

A proposal for expansion of NALCO's smelter capacity and allied units have been approved by Govt. of India vide letter dated 26.10.2004. The additional capacities under 2nd phase expansion will be as below:

Mine	:	1.50 MMTPY Bauxite
Alumina Plant	:	525.000 TPY Alumina
Smelter	:	115.000 TPY Aluminium
CPP	:	2 x 120 MW power

The Port facilities at Vizag will be marginally augmented to handle additional loads for export of alumina & import of caustic soda lye.

2. Utkal-E Block in Talcher Coalfield has been allotted by Ministry of Coal, Government of India, to M/s NALCO vide letter No. 47011/7(60)/93-CPA/CPAM/CA dated 27.08.2005.

3. The coal mine is to be used as the captive source for the expansion power plant of NALCO in Angul District i.e. 9th & 10th units of 120 MW each. The grade of coal is expected to be 'G'. The annual requirements of coal will be 2.00 million tonnes at 90% PLF of the Power Plant.

4. Utkal-E Block, forming a part of larger Utkal block lies in the south-central part of the Talcher Coalfield which has now occupied a premier position with its vast extent of 1860 sq.km., as far as availability of power grade coal is concerned in this part of the country.

On the basis of regional exploration in the south-central part of the coalfield a potential area of about 22 sq. Km named as Utkal block was identified. Subsequently the Utkal block was sub-divided into 7 blocks namely, Utkal A, B1, B2, C, D, E & F. All these blocks were identified by the Ministry of Coal, Govt. of India for captive mining. Although, regional exploration in larger Utkal block was carried out by Mineral Exploration Corporation Limited at the instance of Central Mine Planning and Design institute Limited from Feb'84 and detailed exploration by CMPDI commenced in April, 1989, it was only in Nov' 03 that Utkal-E block was taken up, independently for detailed exploration by CMPDI after the advice from MOC, to explore this block on top priority. Accordingly, CMPDI DEPLOYED ONE DRILL FROM Regional institute-VI, Singrauli, RI-VI mobilized two of its drilling rigs and started drilling w.e.f. 10.12.03.

#### 5. Objective:

The detailed exploration in Utkal block was undertaken to make qualitative and quantitative assessment of the coal resources available with a view to establish the quarriable potentialities and firm up the structural set-up. The present investigations were restricted upto Seam IIA because Seam I, belonging to Karhabari Formation, occurs in 3 or more, less than 1 m thick splits and shows impersistent development in nearby blocks.

#### 6. Location:

Utkal-E block is located in between Utkal-F block in the west & Utkal-D block, in the east, in the south-central part of Talcher Coalfield (Plate-I, Fig. I). It lies between latitude  $20^{\circ}55'42''$  &  $20^{\circ}57'43''$  North and longitude  $84^{\circ}55'49''$  &  $84^{\circ}56'37''$  East. Administratively, it is under the jurisdiction of Chhendipada tehsil, Angul district. Survey of India toposheet No. 73 D/13 on RF 1:50,000 (2 cm to 1 km) and special toposheet No. L2 on RF 1:10,000 (10 cm to 1 km) covers the block area.

#### 7. Communication & Accessibility:

Angul, the nearest township and district HQ is located, at a distance of about 26 km from the block towards south-east on National Highway No. 42 (Bhubaneswar-Sambalpur). Tehsil HQ, Jarpara around 10 km south-west of block is approachable by an un-metalled road. BNlock is approachable from village Raijharan located towards east, at a distance of 3 km on the metalled road joining Chhendipada to Angul through village Dubamalia. An un-metalled jeepable road traverses the entire block from south to north. A few kachcha cart track and forest road also pass through the block. Angul Railway Station, about 26 km from the block, on Sambalpur-Talcher-Bhubaneswar rail line of South-Eastern Railways, is the nearest rail head. Paradip Port and Biju Pattnaik International Airport are the nearest water air terminals respectively. Bhubaneswar, the State Capital, is around 170 km from the area.

#### 8. Area of the Block:

Utkal-E block, covering a surface area of 4.60sq.km is rectangular in shape, having about 3.5 km length in north-south direction and approximately 1.3 km width in east-west direction. Block boundaries are as follows:

- On the north : Southern bank of Singhada Jhor
- On the South : An arbitrary east-west line drawn 260m south of boreholes CMTU-090 & 094, JOINING SOUTH-WESTERN AND SOUTH-EASTERN corners OF Utkal- D and Utkal-F blocks respectively.
- On the east : Western boundary of Utkal-D block.
- On the west : Eastern boundary of Utkal-F block.

Sl. No.	Pattern	Area in (Ha.)		
		Village Forest	Non-Forest	Grand Total
1	Mining	42.2279	164.0486	206.2765
2	Dumping	101.7700	148.1170	249.8870
3	Top Soil Stack	1.8700	0.0000	1.8700
4	Road & Corider	2.0440	3.1530	5.1970
5	Office, R.S. & Other infrastructure	13.0000	5.2490	18.2490
6	Barrier & Embankment	4.3200	9.5800	13.9000
7	7.5 Safety Zone Area barrier along the lease boundary	2.7390	6.4430	9.1820
8	Singra Jhor & its 50m Safety Zone barrier	1.2070	9.4990	10.7060
9	Magazine & its Safety Zone area.	0.0000	8.4650	8.4650
	Total Safety Zone area ✓	3.9460 ✓	24.4070	28.3530
	<b>Grand Total</b>	<b>169.1779</b>	<b>354.5546</b>	<b>523.7325</b>

9. As the overburden volumes will be relatively smaller, waste disposal would not pose any major problems. Suitable steps will be adopted for waste rock disposal, including back filling of worked-out areas.

10. Coal will be transported to CPP or loaded into Railway Wagons at a suitable siding, close to Utkal-E Block from where these wagons will be hauled by East Coast Railway, via Angul to the Captive Power Plant (CPP).

Divisional Forest Officer  
Angul, Division