

Received
17/3/2022

नालको  NALCO

NATIONAL ALUMINIUM COMPANY LIMITED

(A Government of India Enterprise)

COAL MINES DIVISION

S&P COMPLEX, Angul

Email:- ashutosh.roul @nalcoindia.co.in, gm_uecb@nalcoindia.co.in

Ref No:- NALCO/ Coal Mines Division / 038 /2022

Date: 17.03.2022

To

The Divisional Forest Officer,
Angul Forest Division,
Angul Odisha.

Sub: - Proposal for diversion of 169.1779 ha. of forest land for coal mining in respect of Utkal-E Coal Mines under Section-2 of Forest (Conservation) Act, 1980 by NALCO.

Ref: - (i) MoEF & CC, File no 8-07/2020-FC dtd 12.03.2021
(ii) MoEF & CC, observation vide letter dtd 29.12.2021
(iii) Your letter no 591/110/DRP/2021 dated 28.01.2022

Dear Sir,

Inviting reference to the letter mentioned above, we are herewith furnishing the point wise compliance to the MoEF & CC observations as follows:

S N	Observations of MoEF & CC	Compliance Status
i	In compliance to condition no. 1 (b) of Stage-I approval, a certificate from the Nodal Officer (FCA) to the effect that no plantation has been taken up in the degraded forest land proposed for CA previously. The same needs to be submitted by the State.	In compliance to this the DFO Bolangir Forest Division had issued Land Suitability Certificate certifying that no plantation has been taken up in the degraded forest land proposed for CA previously. The same was enclosed in the Stage-I Compliance report. We are once again submission the copy of the certificated issued by DFO Bolangir Forest Division (Enclosed at annexure 1). Nodal Officer (FCA) requested to issue necessary certificate to this effect for compliance to the MoEF & CC observation.
ii	In compliance to condition no. (3) the KML files of diverted area, the CA areas, the proposed SMC treatment area and the WL, Management Plan area have not been uploaded on the e-Green watch portal with all requisite details.	DFO Angul & PCCF (Nodal) office are unable to uploaded the KML on the E-Green watch portal as the site has not been opened in favour of this project & Stage-II Clearance year is required for registration of FCA Project (Undertaking, Screen Shot of the portal enclosed as annexure 2 & 2A). However we are once again submitting the KML files of diverted area, the CA areas, and the WLMP area in CD (enclosed as annexure 2B). The same may please be uploaded on the e-Green by DFO Office after Stage-II Forest Clearance. The KML file of SMC plan will be submitted after approval of the DPR prepared by M/s CMPDI.

<p>iii</p>	<p>Conditions (5) regarding revised Mining Plan was stipulated as the year wise details of area to be back filled and reclaimed were missing in the Progressive Mine Closure Plan as well as Reclamation Plan submitted by the CMPDIL. Year wise detail of back filled area may therefore be made available by the State.</p>	<p>The revised mining plan & mine Closure plan of Utkal D&E Coal Block has been approved by MoC GoI on 10.03.2022. (MoC approval letter enclosed as annexure 3A)</p> <p>Year wise detailed of back filled area & reclaimed area as detailed at chapter 8 of revised Mining Plan is enclosed as annexure 3B.</p>
<p>iv</p>	<p>In compliance to condition no. (6) the State Government furnished information of Site-Specific Wildlife Conservation Plan and Regional Wildlife Management Plan.</p> <p>However, Soil and Moisture Conservation Plan, as envisaged in the Condition has not been submitted, the same needs to be submitted along with detail of cost implications and their deposition into the account of State CAMPA</p>	<p>NALCO has entered into Coal Mining agreement (CMA) with MDO, M/s Utkal Coal Mining India Pvt Ltd on 08.03.2022. As per the Coal Mining agreement the commercial part of the subject work will be taken up by M/s Utkal Coal Mining India Pvt Ltd (UCMIPL).</p> <p>M/s CMPDI has given budgetary quotation to our MDO, M/s UCMIPL for preparation of the DPR for Soil Moisture Conservation measures through LiDAR survey work over an equivalent Mining Lease area for Utkal-E Coal mine of NALCO. As per the time schedule submitted by M/s CMPDI, survey work & DPR preparation will take around 3 months time (Copy of budgetary quotation enclosed as annexure 4A in Six Sets).</p> <p>We are already in the process of awarding the work to M/s CMPDI through our Mine Developer Cum Operator (MDO). The work Order will be issued very soon.</p> <p>In view of the above, it is requested to kindly accept an undertaking from NALCO to pay the implementation cost of Soil Moisture Conservation measures as per the approved DPR as & when the demand is raised by the forest department. (Copy of the undertaking enclosed as Annexure 4B in Six Sets)</p>

Your good office is requested to kindly upload the KML files on the e-Green watch portal & transmit the compliance report to MoEF & CC for further processing & issue of Stage-II Forest Clearance.

Thanking You,

Yours Faithfully,



Ashutosh Rouh
General Manager (Mines)

LAND SUITABILITY CERTIFICATE

This is to certify that 340.00 Ha. of degraded forest land in Barghati R.F. of Saintala Range in Bolangir Forest Division identified for Compensatory Afforestation in lieu of 169.1779 Ha. of forest land for diversion of Utkal-E coal mines by M/s. NALCO, Angul is suitable for plantation from management point of view and is free from encroachments and encumbrances. No plantation has been carried out in the particular area previously.


Authorized Signatory

के. के. पंडा/ K. K. Panda
कार्यापालक निदेशक (परियोजना-खान) प्रभारी
Executive Director (Project-Mine) /c.
परियोजना एवं तकनीकी विभाग/ Project & Technical Deptt.
नेशनल एल्युमिनियम कम्पनी लिमिटेड
National Aluminium Company Ltd.
भुवनेश्वर/ Bhubaneswar-751013


Divisional Forest Officer

Divisional Forest Officer
Bolangir Forest Division


Divisional Forest Officer
Angul, Division



UNDERTAKING

MoEF &CC File No.8-07/2020-FC dtd. 12.03.2021

Undertaking regarding Condition No. A (3)

DFO Angul & PCCF (Nodal) office are unable to upload the KML on the E-Green watch portal as the site has not been opened in favour of this project & Stage-II Clearance year is required for registration of FCA Project (Screenshot enclosed as annexure 2A).

We are also submitting the KML files of diverted area, the CA areas, and the WLMP area in CD (enclosed as annexure 2B). The same may please be uploaded on the e-Green watch portal by DFO Office. We further undertake to submit the KML file of SMC treatment area as per the approved DPR for uploading in the E-Green watch portal.

Place: Bhubaneswar

Date: 14.03.2022


Divisional Forest Officer
Angul, Division


Authorized Signatory
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FCA Projects, Diverted Land, CA Land Management

Main Menu

 [ccems dfo 496]
 Division- Angul
 10 Mar 2022, 14:14:29 IST

Home FCA-1980 Projects Diverted Lands CA Lands Reports

Map FCA Projects related to your division (land diverted or Land for CA lies in your division)

Help

In this form, you will have to map FCA projects under which either some land has been diverted in your division or you have received some for (CA) Compensatory Afforestation. In case the land has been diverted in some other division but the land for CA to be carried out against the project lies in your division, you will have to map the project with your division.

Please use year, project type or enter some text in the text box to search for the FCA projects.

Select FCA Project Year : --Select All--

Select FCA Project Type : --Select All Types--

Search by Project Name/Area(in Ha)/Agency/Purpose : Utkal

Search FCA Projects As per above criteria

View Mapped FCA Projects List

Instruction: Click on the  icon to map or link the project with your division.

Project List that are not mapped with the Division

Page 1 of 1

View 1 - 4 of

FCA Project	Project Type	Year	Land Diverted(Ha.)	Agency	Map Project with My Divis
1 DIVERSION OF ADDITIONAL FOREST LAND 2.335 HA FOR CONSTRUCTION OF CONVEYOR CORRIDOR AND FORMATION OF MINES ACCESS ROAD IN BAPHLIMALLI BAUXITE MINES PRO [10778]	Mining	2010	2.335		
2 MINING LEASE TO UTKAL ALUMINA INTERNATIONAL LTD FOR ALUMINA REFINERY [10928]	Others	1999	102		
3 Baphlimali Bauxite Mining Project of M/s Utkal Alumina International Limited (UAIL) [37216]	Mining	2015	233.34	M/S HINDALCO INDUSTRIES LTD.	
4 Joda to Paradeep Iron Ore Slurry Pipelines System [Alignment under Non-RoW]of M/s JSW Utkal Steel Ltd. [40391]	Drinking Water pipeline	2019	0.654	JSW UTKAL STEEL LIMITED	

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 Executive Director (Project-Mines) I/c.
 परियोजना एवं तकनीकी विभाग/ Project & Technical Deptt.
 नेशनल एल्यूमिनियम कम्पनी लिमिटेड
 National Aluminium Company Ltd.
 भुवनेश्वर/ Bhubaneswar-751013

Hireesh
 Divisional Forest Officer
 Angul, Division


 Divisional Forest Officer
 Angul, Division

Application No.
Utkal D and UtkalE Coal Mines ORAN/APP0058/2021
Coal Controller Organization
A subordinate organization of
Ministry of Coal, Government of India,

ShastriBhawan, New Delhi
2022-03-10

To
National Aluminium Company Limited
Address:
National Aluminium Company Limited State- ORISSA District- Angul
Email: sanjay.patel@nalcoindia.co.in
Contact: 9437029513
Fax:

Subject: Approval of Mining Plan and Mine Closure Plan (first Modification) for Utkal D and UtkalE Coal Mines of M/s National Aluminium Company Limited

Sir,

I am directed to refer to your application for approval of Mining Plan and Mine Closure Plan for Utkal D and UtkalE Coal Mines located in TALCHER Coal Field Submitted through application number APP0058 of Single Window Portal of Ministry of Coal for approval of the Central Government under Rule 22E of MCR 1960 for a rated capacity of 4.5Mtpa Peak rated capacity 6.7500 Mtpa, Lease area 825.01Ha and Project area 863.22 Ha has been considered and in-Principle approval of the Central Government there on is here by conveyed under Section 5(2)(b) of the Mines & Minerals (Development & Regulation) Act 1957 subject to the following conditions:

1. The project proponent should ensure implementation of all observations made by internal committee during actual operation.
2. Project Proponent shall take all necessary precautions regarding safety of mine workings and persons deployed therein.
3. Mining lease of this block shall not encroach into any other adjacent coal block.
4. The cost of abandonment for carrying out the closure activities envisaged in the Mine closure plan is indicative. The actual cost for carrying out the activities at the time of final closure may be higher. The actual cost of abandonment will have to be borne by the project proponent for carrying out the closure activities.
5. The approval of the Mining Plan (Including Mine Closure Plan) is without prejudice to the requirement of approvals from competent /prescribed authority under the relevant rules/ regulations etc.
6. Approval of Mining plan is technical in nature, which is granted with a view to facilitating further developmental activities by the allottee. This approval will have no effect on the penalty provisions of the agreement in case of nonachievement of Milestones.
7. Monitoring of milestone for development of mine will be as per efficiency parameters in CBDPA/CMDPA and appropriation of PBG will be done in case of failure/delay in compliance with the timelines of CBDPA/CMDPA.
8. It has been observed that detailing, as per Guidelines of MoC for preparation of Mining Plan dated 29.05.2020, has not been done for reserves to be extracted by highwall mining. In this regard a scientific study for design of web and pillar width has been suggested in the report. After completion of the proposed scientific study, the project proponent shall submit for approval a Revised Mining Plan and Mine Closure Plan incorporating the details (as per Guidelines of MoC for preparation of Mining Plan dated 29.05.2020) of liquidation plan of reserves to be extracted by highwall mining also (not later than second five yearly periodic examination as per para 2.2 of MoC guidelines for preparation of Mining Plan dated 20.05.2020 as production from highwall mining has been shown from 12 th year).
9. The forest area in the south of the Geological Block is coal bearing (refer Annexure-18 and Annexure-20 of Mining Plan). In future, attempts shall be made to mine coal in the area also (to be reviewed during every five yearly periodic examination as per para 2.2 of MoC guidelines for preparation of Mining Plan dated 29.05.2020). (Note: Coal

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National Aluminium Company Ltd.
भुवनेश्वर/ Bhubaneswar-751013

Divisional Forest Officer
Angul, Division

is not deep seated in the area).

10. Few areas (in patches in the north) in the allocated geological block (non forest area) has not been projectized and included in the lease area mentioned in the Mining Plan. This shall be done at a future date. (to be reviewed during every five yearly periodic examination as per para 2.2 of MoC guidelines for preparation of Mining Plan dated 29.05.2020).

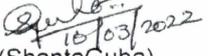
11. Approval of Mining Plan and Mine Closure Plan is restricted to the activities / structures/evacuation route/ roads/ water bodies/other surface features/land outline/infrastructure within the Geological Block/Project Area. Other activities / structures /evacuation route/ roads/ water bodies/other surface features/ land outline/ infrastructure outside the Geological Block/Project Area shall not be part of the Mining Plan (in line with para 1.6 of MoC guidelines for preparation of Mining Plan dated 29.05.2020).

12. Note- Shri Asesha Das is an invitee..

Presently no dues are pending against office of the Nominated Authority vide no NA - 410/4/2020-NA dated 24 Janaury 2022 but due to programming protocol of SWCS it is placed to Nominated Authority before issuing the approval letter.

You are requested to obtain no dues with respect to allocation conditions from Nominated Authority and submit the the same to this office for issuance of Approval letter of the Mining Plan and Mine Closure Plan.

Your Faithfully


15/03/2022
(Shanta Guha)

Deputy Assistant Coal Controller,

Coal Controller Organisation (A subordinate organization of Ministry of Coal)

Copy to:

- 1.Under Secretary,NA section,MoC
- 2.Under Secretary,NA section,MoC

Approved

Mine Plan and Mine Closure Plan
(First Modification/Revision)

For

Utkal D and UtkalE Coal Mines

TALCHER Coal Field
(Under Rule 22E of MCR 1960)
Angul
ORISSA

Project area 863.22 ha

Targeted Capacity 4.5 MTPA
Peak Rated Capacity -6.7500MTPA

Prepared By

DEBASHIS ROY

Contact No. - 9437369231

Email ID - debashis.roy@coalindia.in

APPLICANT

National Aluminium Company Limited

NALCO Limited.
NALCO Bhawan,
Plot P/1, Nayapalli, Bhubaneswar
Odisha - 751013
India

Authorized Signatory

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Divisional Forest Officer
Angul, Division

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APPROVED

Chapter-8: Progressive & Final Mine Closure Plan

8.1.1 Land Degradation and restoration Schedule

Tentative Land Degradation and Technical Reclamation (Commutative Area Ha)									
Year/Stage		Land Degraded				Technically Reclaimed Area			
(Life of the mine plus post closure period)		Excav	Dump (Extn + Top Soil)	Infra/others	Total	Backfill	Dump (Extn + Top Soil)	Others	Total
Up to Base year	2021	0	0	0	0.0000	0	0	0	0.0000
Y-1	2021-22	0	0	4.50	4.5000	0	0	3.10	3.1000
Y-3	2023-24	9.84	17.11	13.45	40.4000	0	13.11	46.54	59.6500
Y-5	2025-26	28.38	29.59	27.40	85.3700	0	25.59	108.60	134.1900
Y-10	2030-31	88.07	116.31	27.58	231.9600	0	112.31	155.14	267.4500
Y-15	2035-36	163.79	270.63	27.58	462.0000	19.48	266.63	155.14	441.2500
Y-20	2040-41	204.09	334.79	27.58	566.4600	61.73	330.79	155.14	547.6600
Y-25	2045-46	254.84	345.41	27.58	627.8300	103.13	345.41	155.14	603.6800
Y-30	2050-51	290.81	345.41	27.58	663.8000	134.24	345.41	155.14	634.7900
Y-35	2055-56	322.33	345.41	27.58	695.3200	162.10	345.41	155.14	662.6500
Y-40	2060-61	352.08	345.41	27.58	725.0700	196.85	345.41	155.14	697.4000
Y-45	2065-66	379.85	345.41	27.58	752.8400	238.17	345.41	155.14	738.7200
Y-48	2068-69	393.44	345.41	27.58	766.4300	254.83	345.41	155.14	755.3800
Post Closure									
Y-51	2071-72	393.44	345.41	27.58	766.43	254.83	345.41	166.19	766.43

8.1.2 Tentative Biological Reclamation (Cumulative in "Ha")

Year/Stage		Biologically Reclaimed Area					Forest land (Return)	Un Disturbed/ To be left for Public/com Use	Total
(Life of the mine plus post closure period)		Agriculture	Plantation	Water Body	Public/ Company Use	Total			
Up to Base year	2021	0	0	0	0	0.0000	0	96.79	96.7900
Y-1	2021-22	0	0	0	0	0.0000	0	96.79	96.7900
Y-3	2023-24	0	9.55	0	2.77	12.3200	0	96.79	109.1100
Y-5	2025-26	0	22.21	0	5.54	27.7500	0	96.79	124.5400
Y-10	2030-31	0	65.47	0	8.30	73.7700	0	96.79	170.5600
Y-15	2035-36	0	145.81	0	11.07	156.8800	0	96.79	253.6700
Y-20	2040-41	0	219.76	0	13.84	233.6000	0	96.79	330.3900
Y-25	2045-46	0	320.11	0	16.61	336.7200	0	96.79	433.5100
Y-30	2050-51	0	446.49	0	19.38	465.8700	0	96.79	562.6600
Y-35	2055-56	0	473.84	0	22.14	495.9800	0	96.79	592.7700
Y-40	2060-61	0	510.90	0	24.91	535.8100	0	96.79	632.6000
Y-45	2065-66	0	559.51	0	27.68	587.1900	0	96.79	683.9800
Y-48	2068-69	0	596.65	20.12	37.64	654.4100	0	96.79	751.2000
Post Closure									
Y-51	2071-72	11.05	697.62	20.12	37.64	766.43	0	96.79	863.22

S.No	Parameters	Details
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8.2	Post Closure Water Quality management (Existing water bodies available in the lease hold area; Measures to be taken for protection of the same including control of erosion, sedimentation, siltation, water.	Maximum effort will be made to recycle or reuse the treated effluents totally to the extent possible by keeping the make of water in different sumps or low lying areas of the mine. The final voids of the quarries will be left as a water reservoir for water harvesting and also recharging the aquifer in the surrounding area which will serve following purposes. Source of supply of water for industrial and fire-fighting purposes of nearby mines. Source of supply of potable water after necessary treatment. A place of bathing and washing for the local population. Pisciculture. For recharging the aquifer in the area. In the post-mining period, the drainage pattern of the reclaimed area will be such that the run-off will be diverted to final void of the quarry which will be developed as a water reservoir for water harvesting and also recharging the aquifer in the surrounding area.
8.3	Post Closure Air Quality management.	The mining and its related activities will affect ambient air quality. The ambient air will be influenced due to presence of RPM, SPM, SO ₂ NO _x which will be generated due to various activities related to the project. The concentration of pollutants will vary depending upon micro-meteorological parameters of area. Appropriate air pollution control measures will be taken so that the ambient air quality is maintained within stipulated standards. Both preventive and suppressive measures to be taken are elaborated below DRILLING OPERATION All drills will be equipped with dust extractors/arrestors/wet drilling arrangement. Proper maintenance and handlings of drilling units will be done. Coal production will be done by using eco-friendly Surface Miners. BLASTING OPERATION Blasting will be done in a proper way to minimize the generation of fugitive dust, noise and vibration. Proper spacing and burden of blast holes will be maintained. LOADING AND TRANSPORT The haul roads will be sprayed regularly with water. All service roads will be blacktopped. Provision of greenbelts around the quarry, industrial area, service building area and colony site will be made. COAL HANDLING PLANT (CHP) Provision of Reclaim Feeder Complex with all dust suppressing arrangements. Provision of covers on the conveyor belts, unloading/transfer points to prevent access of wind. Suppression of coal dust at transfer points and at other points in the coal flow circuit by provision of water jets and dry fog system. Minimization of the height of coal-fall at transfer points to reduce the dust generation and if necessary, provision of dust suppression measures. Improved maintenance of plant and machinery including provision of condition monitoring instruments. FIRE AT COAL FACES COAL STOCK YARDS In order to prevent accidents due to fire every mine should have a proper firefighting organization under the control of Manager of the mine or the Safety officer. Firefighting stations should be established near the entrance of the mine with adequate firefighting equipment. Adequate number of persons should be trained in firefighting who should be familiar with all firefighting equipment. The coal stocks should be regularly liquidated or else it should be properly dozed and made dome shaped to prevent entry of air and prevent spontaneous heating. Pipe lines should be laid around the coal stock to deal with fire in case of emergency. In the quarry, the coal benches should be properly dressed and no loose coals to be left which facilitate spontaneous heating. Before deploying any equipment in a fiery coal bench, it should be isolated, dealt with fire and then allow machines to operate.

8.4 Waste Management (Figures in MM3) (Tentative)

Year/Stage		OB Removal (Cumulative)			External Dump (Cumulative)		Internal Backfilling (Cumulative)		Embankment (Cumulative)	
(Life of the mine plus post closure period)		Top Soil	OB	Total	Top Soil	OB	Top Soil	OB	Top Soil	OB
Up to Base year	2021	0	0	0	0	0	0	0	0	0
Y-1	2021-22	0.01	0	0.01	0	0	0	0	0	0
Y-3	2023-24	0.11	1.91	2.02	0.11	1.91	0	0	0	0
Y-5	2025-26	0.25	8.42	8.67	0.25	8.42	0	0	0	0
Y-10	2030-31	0.77	31.74	32.51	0.77	32.18	0	0	0	0
Y-15	2035-36	1.33	99.20	100.53	1.33	97.33	0	1.87	0	0
Y-20	2040-41	1.80	150.09	151.89	1.64	121.52	0	28.57	0	0
Y-25	2045-46	1.95	199.72	201.67	1.95	136.75	0	62.97	0	0
Y-30	2050-51	2.06	235.59	237.65	2.01	139.91	0.02	95.64	0.01	0.03
Y-35	2055-56	2.16	278.39	280.55	2.01	139.91	0.12	138.40	0.01	0.07
Y-40	2060-61	2.25	321.20	323.45	2.01	139.91	0.21	181.20	0.02	0.07
Y-45	2065-66	2.33	364.02	366.35	2.01	139.91	0.31	223.99	0.03	0.07
Y-48	2068-69	2.36	394.38	396.74	2.01	139.91	0.32	254.37	0.03	0.07
Post Closure										
Y-51	2071-72	2.36	394.38	396.74	2.01	139.91	0.32	254.37	0.03	0.07

8.5 Top Soil Management – (Including Action plan for Top Soil management) (Tentative)

Year/Stage		Top Soil Removal Plan	Top Soil Used				Total Utilised
(Life of the mine plus post closure period)			Spreading Over Embankment	Spreading Over Backfill area	Spreading Over External OB Dump area	Used in Green Belt area	
Up to Base year	2021	0	0	0	0	0	0
Y-1	2021-22	0.01	0	0	0	0	0
Y-3	2023-24	0.11	0	0	0.11	0.07	0.07
Y-5	2025-26	0.25	0	0	0.25	0.16	0.16
Y-10	2030-31	0.77	0	0	0.77	0.16	0.31
Y-15	2035-36	1.33	0	0	1.64	0.16	0.53
Y-20	2040-41	1.80	0	0	1.95	0.16	0.79
Y-25	2045-46	1.95	0	0	2.01	0.16	0.98
Y-30	2050-51	2.06	0.01	0	2.01	0.16	1.24

Y-35	2055-56	2.16	0.01	0.12	2.01	0.16	1.46
Y-40	2060-61	2.25	0.02	0.21	2.01	0.16	1.79
Y-45	2065-66	2.33	0.03	0.31	2.01	0.16	2.09
Y-48	2068-69	2.36	0.03	0.32	2.01	0.16	2.25
Post Closure							
Y-51	2071-72	2.36	0.03	0.32	2.01	0.16	2.36

S.No	Parameters	Details
8.6	Management of Coal Rejects.	Since there is no processing and beneficiation of coal envisaged in the project report, hence it is not applicable.
8.7	Restoration of Land used for Infrastructure.	1 Rail corridor of MCRL This will be owned and maintained by separate companies and will continue to serve coal blocks at south-west area of the Talcher coal field. The siding lines will be dismantled. 2 Coal handling Plant To be dismantled totally 3 Workshops Stores To be dismantled totally 4 Surface Roads To be handed over to State Government in good condition who is supposed to maintain also. 5 Offices ancillary buildings To be dismantled totally 6 Electric poles, cables, substations To be dismantled totally 7 Residential Colony As life of buildings are considered 60 years, they will be in useable condition. May be handed over to any organization interested with acceptance of renovation and maintenance at their own expense.
8.8	Disposal of Mining Machinery.	a) DISPOSAL OR REUSE OF EXISTING HEMM, CHP AND WORKSHOP Mine will be operated by outside agency, who will carry away all machineries after mining for other projects. CHP, workshop at the end of mine life will be dismantled and disposed of. Every effort will be made to restore the area to economic utilization value as per the mine closure plan. b) DISPOSAL OR REUSE OF TRANSMISSION AND SUB-STATION The transmission line and transformers will be dismantled if not required for purposeful use by the local community.
8.9	Safety & Security.	a) DETAILS OF FENCING AROUND ABANDONED QUARRY INDICATING THE LENGTH OF THE FENCING Utkal-D and E OCP is a new mine and has no abandoned quarry. Barbed wire fencing will be made around the periphery of the mine covering the mine entry and excavated area to prevent inadvertent access. Fencing as per specification will be done towards the end of the mine life around the quarry. b) PROVIDING ONE TIME LIGHTING ARRANGEMENT Sufficient lighting as per standard will be provided at all the required places, i.e. working faces, OB dump area, haul road, coal transfer points, loading points, CHP, workshop, etc., to avoid accidents and to create efficient working conditions. Some of these lighting arrangements at critical places will continue after mine closure for safety point of view. The guidelines/instructions from DGMS will be followed in case of discontinuance of mine operation, if any. Provisions in Coal Mine Regulations shall be followed. The mine pit would receive water from three sources namely, direct precipitation over excavated area, surface run-off from the surrounding area and seepage from the strata. During heavy rainstorms, there may be a situation when mine may get flooded. This may cause loss of human life and equipment, etc. All the necessary precautions will be taken against such eventuality throughout the life of the project. Adequate fire-fighting arrangement will be provided. Adequate number of fire extinguishers will be provided for stores and other service buildings. While calculating total water demand for the project, provision for fire-fighting has also been made. c) SLOPE STABILITY ARRANGEMENT FOR HIGH WALL AND BACKFILLED DUMPS The exposed ends of the coal seams and OB will be left with a safe slope to avoid slope failure and collapse of benches. Similarly, at the end of mining operation, safe terminal slope will be provided to avoid pit failure.

8.10 Abandonment Cost and Financial Assurance.

8.10.1 Abandonment Cost: Cost of Activities to be taken up for closure of the mine

Head	Activities	Unit	Quantity	Rate RS/Unit	Amount RS Cr
Progressive Closure	Water quality management	Ls	92	6285	2.66
	Air quality management	Ls	96	41352	18.26
	Waste Management	M CUM	79.32	15000000	118.98
	Barbed wire fencing around dump	m	10141	770	0.78
	Barbed wire fencing around the pit	m	5160	770	0.40
	Filling of Void - Rehanding of Crown dump	MM3			
	Top Soil Management	MM3	2.36	40000000	9.44
	Technical And Biological Reclamation of Mined out of land and OB Dump	Ha	825.01	550000	42.15
	Plantation over virgin area including green belt	Ha	47.38	550000	2.61
	Manpower Cost and Supervision	Employee per year	30	495000	68.31
	Total wall around the dump	m	10141	3630	3.68
	Garland drain	m	1003	4400	0.44
	Garland drain around the dump	m	10141	4400	4.46
	Any other Activity	Nala Diversion			

Dismantling of infrastructure & Disposal/ rehabilitation of mining Machinery	Dismantling of workshop	Ls	42750	693	2.96
	Rehabilitation of the dismantled facilities	Ls			
	Dismantling of pump and pipes/ other facilities.	Ls	3500	693	0.24
	Dismantling of stowing bunker, provisioning of pumps for borewell pumping arrangement.				
	Dismantling of UG equipment				
	Rearranging water pipeline to dump top park/Agriculture land	Ls			0.28
	Dismantling of power lines.	m	6500	165	0.11
	Any other Activity				
Safety and Security	Barbed wire fencing around dump				
	Barbed wire fencing around the pit	m			
	Barbed wire fencing with Masonary pillar				
	Concrete wall with Masonary pillars around the pit	m	2650	4070	1.08
	Securing air shaft and installation of borewall pump				
	Securing of incline				
	Concrete wall fencing around the water body				
	Boundary wall around the water body				
	Stabilisation (viz benching, pitching etc) of side walls of the water body				
	Toe wall around the dump				
	Garland Drain				
	Garland Drain around the dump				
	Drainage channel from main Ob dump	m	1300	4400	0.57
Any other Activity					
Technical and Biological Reclamation of mined out of land and OB Dump	Filling of Void	Ha			
	Top soil management	MM3			
	OB Rehandling for backfilling	MM3			
	Terracing, blanketing with soil and vegetation of External OB Dump	Ha	27.50	1100000	3.03
	Paripharel road, gates, view point, cemented steps on bank	LS			0.28
	Expenditure on development of Agriculture land	Ha	11.05	1100000	1.22
	Landscaping and Plantation	Ls	3.34	23243000	7.76
Any other Activity					
Post Closure management and supervision	Power Cost	Ls	2.94	5.86	1.72
	Post mining water quality management	Ls	168	3752	0.06
	Post mining air quality management	Ls	288	41352	1.19
	Subsidence monitoring for 5 years	Ls			
	Waste management	Ls	30	1650000	4.95
	Manpower Cost and supervision	Ls	90	495000	4.46
	Manpower Cost and supervision				
Others	Enterprenuership development(vocational/skil l development training for sustainable income of affected people)	No	171	110000	1.88
	Golden Handshake/Retrenchment benefits to 100 employees of OC				

	Golden Handshake/Retrenchment benefits to 200 employees of UG				
	Onetime financial grant to societies/ institutions/ organisations which is dependent upon the project	No	10	550000	0.55
	Provide Jobs in other mines of company				
	Continuation of other services like running of school etc.	No	10	550000	0.55
	Any other Activity				
	Total				308.82

8.10.2 Financial Assurance : Amount to be deposited in Escrow account as a security against the mine activities to be carried out for the closure of the mine

WPI as on	Apr-19	121.10
WPI as on base date	Aug 21	135.9
Escalation rate of Closure cost		1.122
	UG	OC
Base Cost "Rs. Crs/Ha	0	0.09
Closure Cost "Rs. Crs/Ha"	0	0.101
Project Area "Ha"	0	863.22
Amount to be deposited into Escrow Account "Rs. in Crs	0	87.185
Amount already deposited into Escrow Account "Rs. in Crs	0	0.5535
Net Amount to be deposited into Escrow Account "Rs. in Crs	0	86.632
Rate of compounding of Annual Closure Cost		5.00%
Balance Life of the project "in Yrs	0	48
Annual Closure Cost "Rs. in Crs"	0	1.805
Amount to be deposited into Escrow Account after compounding @ of 5% "Rs. in Crs"		339.387

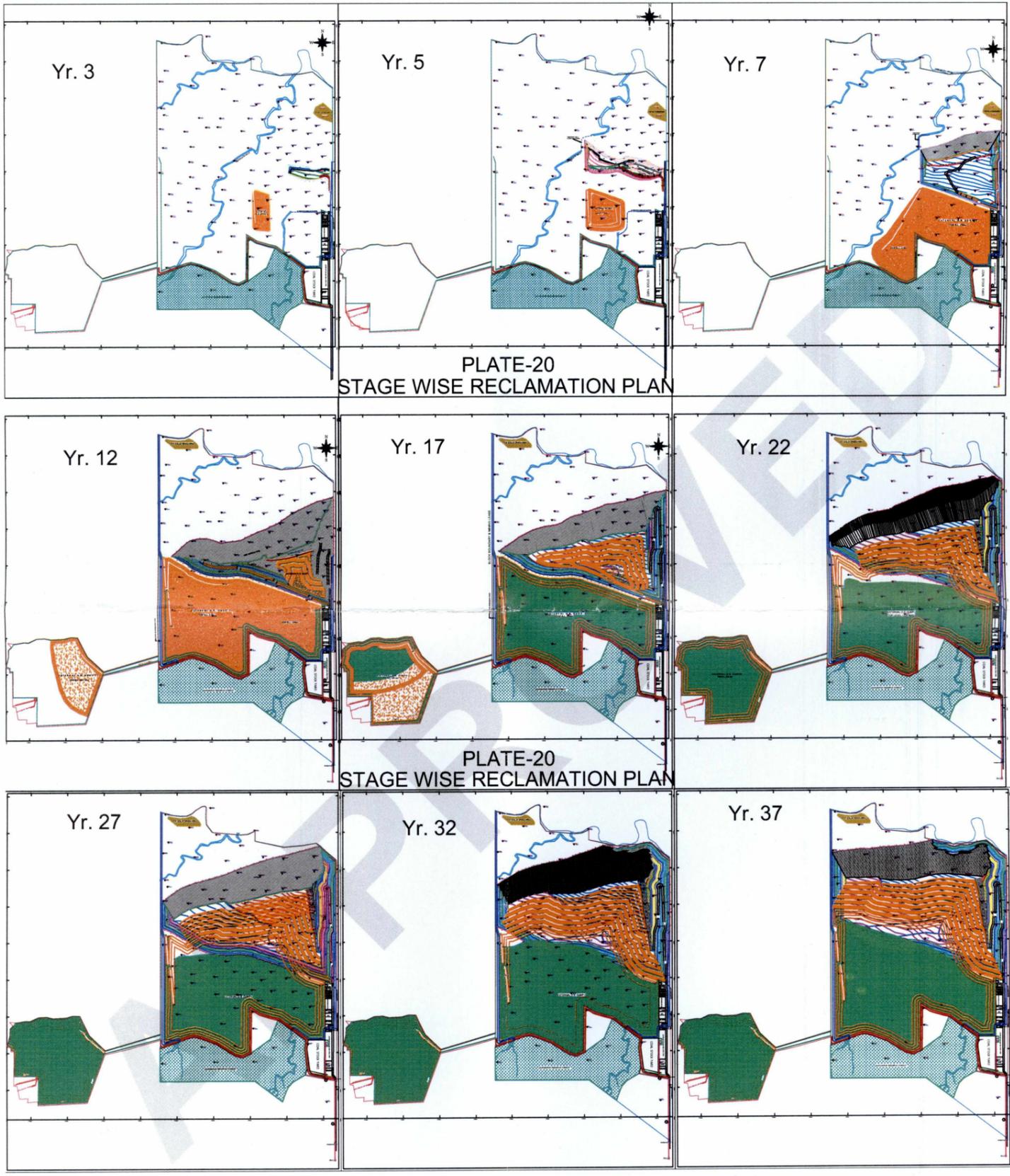
Amount to be deposited into Escrow

Year	OC	Year	UG	Total
1	1.805			1.805
2	1.895			1.895
3	1.99			1.99
4	2.09			2.09
5	2.194			2.194
6	2.304			2.304
7	2.419			2.419
8	2.54			2.54
9	2.667			2.667
10	2.8			2.8
11	2.94			2.94
12	3.087			3.087
13	3.242			3.242
14	3.404			3.404
15	3.574			3.574
16	3.752			3.752
17	3.94			3.94
18	4.137			4.137
19	4.344			4.344
20	4.561			4.561
21	4.789			4.789
22	5.029			5.029
23	5.28			5.28
24	5.544			5.544
25	5.821			5.821
26	6.112			6.112
27	6.418			6.418
28	6.739			6.739
29	7.076			7.076
30	7.43			7.43

31	7.801			7.801
32	8.191			8.191
33	8.601			8.601
34	9.031			9.031
35	9.482			9.482
36	9.956			9.956
37	10.454			10.454
38	10.977			10.977
39	11.526			11.526
40	12.102			12.102
41	12.707			12.707
42	13.343			13.343
43	14.01			14.01
44	14.71			14.71
45	15.446			15.446
46	16.218			16.218
47	17.029			17.029
48	17.88			17.88
Total	339.387		0.000	339.387

APPROVED

Plan / Plate 22



Authorized Signatory

के. के. पंडा / K. K. Panda
 कार्यापालक निदेशक (परियोजना-खान) प्रभारी
 Executive Director (Project-Mine) I/c.
 परियोजना एवं तकनीकी विभाग / Project & Technical Deptt.
 नेशनल एल्युमिनियम कम्पनी लिमिटेड
 National Aluminium Company Ltd.
 भुवनेश्वर / Bhubaneswar-751013

Divisional Forest Officer
 Angul, Division



cmpdi
A Mini Ratna Company

सेन्ट्रल माईन प्लानिंग एण्ड डिजाईन इंस्टीच्यूट लिमिटेड
(कोयला इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उपक्रम)
गोन्दवाना प्लेस, कान्के रोड, राँची - 834031, झारखण्ड (भारत)
Central Mine Planning & Design Institute Limited
(A Subsidiary of Coal India Limited / Public Sector Undertaking of Govt. of India)
Gondwana Place, Kanke Road, Ranchi - 834031, Jharkhand (India)
Corporate Identity Number - U14292JH1975GOI001223

फैक्स / स्पीड डाक / मेल / ई-आफिस द्वारा

Annexure-4A

पत्रांक : सीएमपीडीआई/बी.डी./ए (003)E-695485/I-14112

दिनांक : 14.03.2022

सेवा में,

Sri Tella Balapavan,
Director,
M/s. Utkal Coal Mining India Pvt. Ltd.,
D.No. 50-117-17, Mytri Infra,
NE Layout, Visakhapatnam - 530 013 AP.
e-mail : director@ucmipl.com, tapan.pattnaik@nalcoindia.co.in

विषय : Preparation of Soil Moisture Conserveation (SMC) Measures in the adjoining area of Utkal-E coal mine (NALCO) through LidAR survey for M/s. Utkal Coal Mining India Pvt. Ltd., (UCMIPL) - Reg. Submission of Offer

Ref.: CMPDI's offer letter no. CMPDI/BD/A(003)/E-695489/I-10439, dated 04.03.2022.

महोदय,

Hope, this letter finds you in the best of your spirit and long standing relationship with CMPDIL.

This has reference to email dated 14.03.2022 of Group General Manager (Coal Mines & Project) M/s. NALCO endorsing M/s. UCMIPL for commercial part of the subject assignment. We had earlier given our offer to M/s. NALCO vide our letter dated 04.03.2022.

Accordingly, the offer is being submitted to you consisting of Scope of Services, Time schedule, Consultancy fee, Terms of Payment etc. as detailed below, for your kind consideration and acceptance.

1.0 SCOPE OF SERVICES

The Scope of services of CMPDI for '**Preparation of Soil Moisture Conserveation (SMC) Measures in the adjoining area of Utkal-E coal mine (NALCO) through LidAR survey for M/s. Utkal Coal Mining India Pvt. Ltd., (UCMIPL)**' which consists of the following activities :

- i. LidAR survey work in the adjoining area of Utkal-E coal mine i.e. Durgapur Reserve Forest.
- ii. Agency shall co-ordinate with forest department to carry out the survey work at site
- iii. Preparation of DPR for soil-moisture conserveation (SMC) measure in the adjoining area of Utkal-E coal mine. The DPR should contain the following:
 - Site selection for implementation of soil-moisture conserveation (SMC) plan in the Durgapur Reserve Forest. DGPS coordinate, KML file & Topo Sheet of the SMC implementation site.
 - Existing land use pattern & Satellite imagery analysis. Soil characterization of the adjoining area.
 - Impact on soil & moisture condition of the adjoining area due to coal mining and transportation.
 - Micro watershed concept and proposed technique for soil-moisture conserveation depending upon the nature of soil/sediment/gradient of the area.

Authorized Signatory

क. के. पंड/ K. K. Panda

कार्यापालक निदेशक (परियोजना-खान) प्रवर्तारी

Executive Director (Project-Mine) I/c.

परियोजना एवं तकनीकी विभाग/ Project & Technical Deptt.

नेशनल एल्युमिनियम कम्पनी लिमिटेड

Aluminium Company Ltd.

भुवनेश्वर/ Bhubaneswar-751013



फोन/ Ph : +91 651 2230116 फैक्स/ Fax: +91 651 2232249
ईमेल/ email: gmbd.cmpdi@coalindia.in वेबसाइट/ Website : http://www.cmpdi.co.in

- Detailed cost estimate (based on the latest cost norms of forest department) of the soil-moisture conservation measures along with their long term monitoring.
 - KML files showing location of each measure proposed in the DPR.
- iv. The agency shall submit draft DPR to UCM IPL for comments. Inclusion of observation of UCM IPL if any in the draft DPR and submission of final DPR to DFO Angul in 06 (Six) sets.
- v. Compliance to the queries raised by the forest department on the DPR & Final approval of the DPR from the forest department.
- vi. Any point specifically not mentioned but essential for preparation & approval of the DPR for soil moisture conservation measures shall be included in the scope of work as mentioned above and for this no extra payment will be made to the agency.

2.0 INPUT DATA/INFORMATION REQUIRED

M/s. UCM IPL shall arrange to provide the following Input data/information for the subject assignment:

- a) Copy of EIA/EMP report
- b) Copy of PR/FR.
- c) Identified area to be considered for preparation of SMC report.

3.0 TIME SCHEDULE

The subject assignment would be completed within 03 (Three) months from the 'Zero' date.

Sl. No	Description	Time from Zero date
1	Completion of LidAR survey work of the site	1 month
2	Submission of draft DPR	2 months
3	Submission of Final DPR	3 months

The "Zero" date shall reckon from the date of receipt of Work Order along with payment as mentioned in Clause 6.0(i) of the 'Terms of Payment' and/or Input Data/Information received (as per Clause 2.0), whichever is later.

The delay at any stage of work beyond the control of CMPDI may increase the total time schedule accordingly.

Note: CMPDI shall be entitled to time extension for performance of the contract in the event of any preventive measures being taken by the Government of India or the concerned State Governments to limit the impact of the novel corona virus COVID-19. CMPDI may not be able to perform some or any of its obligations till the existence of such situation.

4.0 CONSULTANCY FEE

The consultancy fee for the subject assignment as per Scope of Services envisaged at would be **Rs. 46,09,500/- (Rupees forty six lakh nine thousand five hundred only)** for carrying out the subject assignment. This fee is inclusive of coal sample testing charges.

The above fee does not include GST, which is to be paid by client as applicable during the billing period in addition to the consultancy fee indicated above. The present rate of GST chargeable is @18% of total consultancy fee.

5.0 DELIVERABLES

DPR for SMC measures

Handwritten signature: *Law*
Date stamp: 14/05/2022

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6.0 TERMS OF PAYMENT

The payment terms for the assignment shall be as below:

- i) 30% of the consultancy fee along with GST for the subject assignment shall be paid by M/s. UCM IPL as initial payment along with the work order.
- ii) 50% of the consultancy fee along with GST for the assignment shall be paid by M/s. UCM IPL on submission of draft DPR by CMPDI
- iii) Balance 20% of the consultancy fee along with GST for the assignment shall be paid by M/s. UCM IPL on submission of final DPR by CMPDI.

7.0 MODE OF PAYMENT

The payment shall be made through e-payment through **SBI COLLECT** :

- 1) Please go to the link - <https://www.onlinesbi.sbi/sbicollect/icollecthome.htm>
- 2) Accept the terms & conditions.
- 3) Choose the state - Choose JHARKHAND
- 4) Type of Corporation - Select PSU – CMPDI Ltd.
- 5) Select Payment Category- Select 'SALES ADVANCE' for advance payment and 'SALES BILLS REALISATION' for payment against bills.

For the purpose of billing, please provide your GST registration no. and copy of registration certificate along-with the work order. Also please provide following details for Billing purposes.

- 1) Name of the Company:
- 2) Billing Address:
- 3) Shipping Address(if different from the Billing address)
- 4) Name of the Nodal Officer:
- 5) Address:
- 6) Email id:
- 7) Mobile no:
- 8) Landline no:

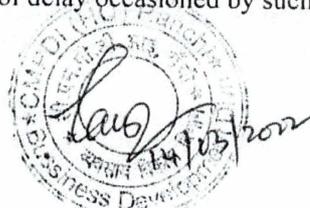
The bill amount is payable within 21 days after receipt of the bill except the initial advance to paid by client.

8.0 FORCE MAJEURE

Neither of the parties hereto shall be considered in default in performance of the obligations under the Agreement if such performance is prevented or delayed by events such as war including civil war (whether declared or not), civil commotion, insurgency, hostilities, revolution, riots, strikes, lock-out, conflagration, epidemics, accident, fire, flood, drought, earthquake or because of any act of god or cause beyond the reasonable control of the party affected or prevented by sufficient cause provided notice in writing is given within 15 (fifteen) days of occurrence of Force Majeure within the shortest possible period by CMPDI to Client and vice versa.

Soon after the cause of force majeure has been removed, the party, whose ability to perform has been affected, shall notify the other party of such cessation and the actual delay occurred with necessary evidence in support thereof. From the date of occurrence of a case of Force Majeure, the obligation of the party affected shall be suspended during the continuance of any inability so caused until the cause itself and inability resulting there from have been removed and the agreed time of completion of the respective obligations under this agreement shall stand extended by a period equal to the period of delay occasioned by such events.

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Should one of the parties be prevented from fulfilling the obligations by a state of force majeure lasting for a period of more than 1 (one) month, the two parties shall consult each other and decide on the future execution of the Agreement.

In case of termination of work due to Force Majeure condition, M/s. UCM IPL shall pay to CMPDI towards all works done and expenses committed by CMPDI up to the date of happening of the Force Majeure event.

9.0 ARBITRATION/ SETTLEMENT OF DISPUTES

Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope operation or effect of this contract or the validity or the breach thereof shall be settled by arbitration in accordance with the Arbitration and Conciliation Act 1996 as amended from time to time and the award made in pursuance thereof shall be binding on the parties.

10.0 TERMINATION

Either party may terminate the agreement for breach by the other party of any term or condition of this agreement should such breach continue for a period or more than 60 (sixty) clear days provided that the non-defaulting party first delivers to the defaulting party written notice of breach, stating particulars of the breach and requesting the defaulting party to remedy the same; and the intention of the non-defaulting party to terminate this agreement for breach unless remedied, provided that within such 60 (sixty) clear days after defaulting party receives such notice, the defaulting party does not remedy such breach.

Upon termination of the Agreement, the Client shall make payment to CMPDI for services satisfactorily performed and other reimbursable expenditures already incurred by CMPDI, prior to the effective date of termination.

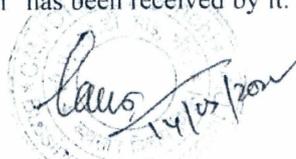
In the event of any dispute, the matter shall be referred to the arbitration as per the "Arbitration" clause of this offer.

Termination of the Agreement shall not prejudice or affect the accrued rights or claims and liabilities of the parties.

11.0 CONFIDENTIALITY

- (A) Each party shall treat all information obtained from the other party pursuant to this Letter of Award (LOA) as "Confidential Information", except to the extent that such information:
- i) Was publicly known prior to the date of the LOA or has become publicly known after the date of LOA; or
 - ii) Is required by law to be disclosed; or
 - iii) Is acquired from a third party having the right to disclose it to the relevant person; or
 - iv) Independently acquired or developed by a party without the benefit or use of any of the Confidential Information.
- (B) The parties shall treat the "Confidential Information", as confidential and shall not, without prior written consent of the other Party, disclose, publish or communicate or allow the disclosure, publication or communication of "Confidential Information" or any part of it to any person other than its consultants, advisors and employees needing access to the "Confidential Information" in the course of their duties as consultants, advisors and employees.
- (C) Neither party shall use the "Confidential Information" in any way for any purpose other than the purpose for which it is meant. Either party shall also keep confidential the fact that the "Confidential Information" has been received by it.

Contd...P/5



A circular stamp is partially visible, containing the text 'U.C.M.I.P.L.' and '14/05/2014'. Overlaid on the stamp is a handwritten signature and the date '14/05/2014'.

- (D) The parties hereby do undertake that its employees, advisors and consultants will not take (or omit to take) any action which if taken (or not taken) by the Party would constitute a breach of the obligations of the Party to the other Party under the LOA.
- (E) In the event that a Party or any of its employees, officers, directors and advisor/ consultant / lenders are obliged to disclose any "Confidential Information" to any Government Authority / Agency, Court / Tribunal or other judicial authorities, other regulatory authorities including Stock Exchange Authorities as a result of court / tribunal order or pursuant to Government action or under applicable laws, the recipient shall immediately inform the other party. The Party or any of its employees, officers, directors and advisor / consultant / lenders may disclose such "Confidential Information" to the extent required by the relevant court / tribunal order or government action or under applicable laws.

12.0 VALIDITY

This offer is a budgetary offer and not a quote. This offer is valid only for 90 days and restricted to this Work of " **Preparation of Soil Moisture Conserveation (SMC) Measures in the adjoining area of Utkal-E coal mine (NALCO) through LidAR survey for M/s. Utkal Coal Mining India Pvt. Ltd., (UCMIPL)**" only. It is based on the information provided and it is prohibited to use this offer for any purpose other than to negotiate a contract with CMPDI. The Information is confidential and you must not distribute it to any third party, in whole or part, or use this for any other purpose without the express written permission of CMPDI. Any assumptions, opinions and estimates expressed in the Offer constitute CMPDI's judgment as of the date thereof and are subject to change without notice. CMPDI does not accept any liability for any direct, consequential or other loss arising from reliance on the contents of this Offer.

धन्यवाद एवं सदैव अपनी सर्वोत्तम सेवाओं के आश्वासन सहित ।

भ व दी य

महाप्रबन्धक (व्यवसाय विकास)





UNDERTAKING

MoEF &CC File No.8-07/2020-FC dtd. 12.03.2021

Undertaking regarding Condition No. A (6)

For compliance to the condition no. A-6 of Stage-I order and as suggested by the forest department in the meeting held on 08.02.2022 & 25.02.2022, the DPR for Soil Moisture Conservation (SMC) measures over an equivalent Mining Lease area of Utkal-E Coal block in the adjacent Durgapur Reserve Forest will be prepared by M/s CMPDI. As per the time schedule submitted by M/s CMPDI, survey work & DPR preparation will take around 3 months time.

NALCO do hereby undertake to deposit the implementation cost of Soil Moisture Conservation measures as per the approved DPR as & when the demand is raised by the forest department in the ORISSA CAMPA Fund.

We further also undertake to submit the KML file of SMC treatment area as per the approved DPR for uploading in the E-Green watch portal.

Place: Bhubaneswar

Date: 14.03.2022


Divisional Forest Officer
Angul, Division


Authorized Signatory

के. के. पंडा / K. K. Panda
कार्यापालक निदेशक (परियोजना-खान) प्रधारी
Executive Director (Project-Mine) I/c.
परियोजना एवं तकनीकी विभाग / Project & Technical Deptt.
नेशनल एल्युमिनियम कम्पनी लिमिटेड
National Aluminium Company Ltd.
भुवनेश्वर / Bhubaneswar-751013