

Ref No. NBC/ED(P&T)/1865

Date: 29.05.2024

To, The Deputy Director General of Forest, Integrated Regional Office, Ministry of Environment, Forest & Climate Change, Regional Office (EZ), A/3, Chandrashekharpur, Bhubaneswar – 751023. Email: roez.bsr-mef@nic.in

Sub: Submission of Half Yearly Compliance Report of Environment Clearance issued to Utkal-E Coal Mines of NALCO for the period of Oct'23 to Mar'24.

#### Ref:

- 1. Environment Clearance of Utkal-E Coal Mines vide letter no. J-11015/31/2007-IA.II(M) dated 10.12.2009.
- 2. Environment Clearance (Corrigendum) of Utkal-E Coal Mines vide letter no. J-11015/31/2007-IA.II(M) dated 26.12.2013.

Dear Sir,

Inviting reference to the subject cited above, we are enclosing the Half Yearly Compliance Report for the period Oct'23 to Mar'24 for the conditions stipulated in Environment Clearance of Utkal-E Coal Mines of NALCO issued vide MOEFCC's letter no. J-11015/31/2007-IA.II(M) dated 10.12.2009 and corrigendum letter no. J-11015/31/2007-IA.II(M) dated 26.12.2013 for your kind consideration. The copy of the compliance report is also being sent in the soft copy through email for your kind perusal.

We wish to inform that all the necessary actions are being taken in compliance to the specific and general condition of Environment Clearance granted to Utkal-E Coal Mines of NALCO.

We trust that the information furnished is in line with your requirement.

Thanking You,

Yours Faithfully, For and on behalf of NALCO

(A K Panda)

GGM (T&C) and Authorized KUMAR PANDA Signator General Manager (T & C) & Authorised Signatory National Aluminium Company Ltd.

नेशनल एल्युमिनियम कम्पनी लिमिटेड

(भारत सरकार का एक उद्यम) निगम कार्यालय National Aluminium Company Limited

(A Government of India Enterprise) **CORPORATE OFFICE** 

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CIN: L27203OR1981GOI000920

### Copy to:

- 1. AIG of Forest, Ministry of Environment Forest & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi 110003 (email: monitoring-ec@nic.in)
- 2. Member Secretary, Central Pollution Control Board, Parivesh Bhawan', East Arjun Nagar, Shahdara, New Delhi 110032 (email: mscb.cpcb@nic.in)
- Zonal Office, Central Pollution Control Board, Southern Conclave, Block 502, 5<sup>th</sup> & 6<sup>th</sup> Floor, 1582 Rajdanga Main Road, Kolkata, WB 700107 (email: rdkolkata.cpcb@gov.in)
- Member Secretary, State Pollution Control Board, Parivesh Bhawan, A/118, Unit 8, Nilkantha Nagar, Nayapalli, Bhubaneswar, Odisha – 751012 (email: paribesh1@ospcbboard.org)
- 5. Regional Officer, State Pollution Control Board, S-3/3, Industrial Estate, Hakimpada, Angul, Odisha (email: rospcb.angul@ospcbboard.org)



# HALF YEARLY COMPLIANCE REPORT (OCTOBER 2023 TO MARCH 2024)

For

Utkal "E" Coal Mines At. Tehsil Chhendipada, District Angul, Odisha

Of

National Aluminium Company Limited (NALCO)

## **Half Yearly EC Compliance of Utkal-E Coal Mines**

MOEFCC File No. J-11015/31/2007-IA.II(M) Dated: 10.12.2009 MOEFCC File No. J-11015/31/2007-IA.II(M) dated 26.12.2013

### Specific Condition: -

S No.	Conditions	Status / Remark
	Stipulated Condition	
(i)	Mining shall not be carried out in forest land until prior forestry clearance is obtained.	Mining activities not yet started inside the lease area of Utkal E Coal Mines. However, Stage-II Forest Clearance of 156.1779 ha out of 169.1779 ha has been accorded from MoEF&CC vide file no. 8-07/2020-FC dated 27.10.2022 and file no. FE-DIV-FLD-0049-2021-20532/FE&CC dated 09-11-2022 for Utkal E Coal Mines.
(ii)	Topsoil shall be stacked properly with proper slope at earmarked site(s) in an area of 1.87 ha and shall not be kept active and shall be used within a year of generation for reclamation and development of green belt.	Mining activities not yet started inside the lease area of Utkal E Coal Mines. Topsoil will be stacked properly with proper slope at earmarked site(s) and shall not be kept active and shall be used within a year of generation for reclamation and development of green belt.
(iii)	OB shall be stacked at the two earmarked external OB dumpsites of an area of 137.01 ha and 115.75 ha each and shall not exceed a maximum height of 90m. The ultimate slope of the dump shall not exceed 28° Reclamation of the dumps shall be done using native species and species of economic importance. Monitoring and management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of 'Environment & Forests and its Regional office located at Bhubaneswar on yearly basis.	Mining activities not yet started inside the lease area of Utkal E Coal Mines. It will be done after start of mining operation.
(iv)	The proponent shall obtain prior approval of the Flood & Irrigation Dept. Govt. of Orissa for the design and plan for diversion of the two nallas flowing within the ML and realign them to their natural courses outside the ML. Dimension and depth of the embankment shall be finalised based on the peak flow of the water and shall be at least 3m above the HFL. The slope of the embankment shall at least 2:1 towards the ML and shall be stabilised with plantation.	NoC for diversion of natural Nallas has been obtained from Department of Water Resources, Government of Odisha vide Letter No. 26553/WR dated 12.10.2022. The diversion plan has prepared based on the peak flow of the water at 3m above HFL. The slope of the embankment shall be at least 2:1 towards the ML. Plantation work will be done on both sides of nallas in phase wise manner. Nallah diversion work not yet commenced in Utkal E Coal Mines.
(v)	An Integrated Plan for Coal Transportation involving conveyor (for a total length of 5.8.km)-cum-rail thereafter to the main railway corridor shall be formulated in consultation with the neighbouring mines and the State government keeping in mind the conservation of the local habitat and fauna such as the Indian Elephant using the habitat.	Mining activities not yet started in Utkal E Coal Mines. Integrated Plan for Coal Transportation involving conveyor-cum-rail will be complied after start of mining operation.
(vi)	Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilised for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly.	Mining operation not yet started in Utkal E Coal Mine.

S No.	Conditions	Status / Remark
	Garland drains (size, gradient and length) and	
	sump capacity shall be designed keeping 50% safety	
	margin over and above the peak sudden rainfall and	
	maximum discharge in the area adjoining the mine site.	
	Sump capacity shall also provide adequate retention	
(vii)	period to allow proper settling of silt material.	Mining appration not yet started in Utkal E Coal Mina
(vii)	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and	Mining operation not yet started in Utkal E Coal Mine.  Dimension of retaining walls at the toe of the dumps
	siltation shall be based on the rainfall data.	and OB benches within the mine to check run-off and
	Situation shall be based on the railitan data.	siltation will be designed based on the rainfall data.
(viii)	Crushers at the CHP shall be operated with high.	Currently mining operation not yet started. Crushers
` '	Efficiency bag filters, water sprinkling system shall be	at the CHP will be operated with high efficiency bag
	provided to check fugitive. emissions from crushing	filters. Water sprinkling system will be provided to
	operations, conveyor system, haulage roads, transfer	check fugitive emissions generated during crushing
	points, etc.	operations, conveyor system, haulage roads, transfer
		points, etc.
(ix)	No washery shall be established in the coalmine project	Mining operation not yet started in Utkal E Coal Mine.
	site without prior environmental clearance from this	Point noted. Washery will not be installed in coal
	Ministry.	mine without prior environmental clearance from
		Ministry.
(x)	Drills shall be wet operated only.	Currently mining operation not yet started. Wet type
(vi)	A project specific Conservation Dlan for the endangered	drilling will be used during drill operation.
(xi)	A project specific Conservation Plan for the endangered	Project specific Conservation Plan was prepared and
	Schedule-I and II fauna including the Indian Elephant and for the medicinal plants found in and around the	submitted to MoEF&CC along with FDP of Utkal E coal mines.
	project area shall be prepared and implemented in	mines.
	consultation with the State Forest and Wildlife	
	Departments. The implementation of the various	
	activities there under, the costs incurred for each of the	
	activities and the status thereof shall be regularly	
	reported to this Ministry and the MOEF Regional Office,	
	Bhubaneshwar and also uploaded on the company's	
	website. The proponent shall also participate in the	
	Regional Wildlife Conservation Plan to be prepared by	
	the State Wildlife Dept. and shall also contribute	
	financially for implementation of the RAP.	
	The project proponent shall engage experts in	
	the fields of wildlife conservation, habitat restoration	
	and taxonomy in formulation and implementation of project specific Wildlife Conservation and Habitat	
	Restoration Plan.	
(xii)	The total area brought under afforestation shall not be	Mining operation not yet started. Plantation will be
(^11)	less than 434.56 ha and include backfilled area (128.18	carried out in phase wise manner as per the plan.
	ha), OB dumps (381.02 ha), topsoil dump (91.87 ha),	Local / native species will be planted in consultation
	along ML boundary (15.99 ha), infrastructure (4.83 ha),	with the local DFO/Agriculture Department. The
	barriers (2.37 ha) and along roads (19.50 ha),	density of the trees will be around 2500 plants per ha.
	embankment (0.3 ha), safety zone (1.78 ha) and vacant	,
	area, and area outside the lease including in township	
	(39.60 ha}-by planting native species in consultation	
	with the local DFO/Agriculture Department. 'The	
	density of the trees shall be around 2500 plants per ha.	
(xiii)	A 3-tier green belt of an area of 25.17 ha shall be	3-tier green belt will be developed within 3 years of
	developed within 3 years of start of project (including:	start of project using a mix of native species. Currently
	period for construction) using a mix of native: species.	mining operation not yet started.
	Avenue plantation using local species shall also be	

S No.	Conditions	Status / Remark
	developed along the main roads, and approach roads	
	to the mine. Green belt shall also be developed using	
	local species shall along the periphery of the site, along	
	the areas such as infrastructure, and at Railway Siding.	
(xiv)	A Progressive Mine Closure Plan shall be implemented	Agreed and shall be complied. Mining operation not
	and OB generated shall be backfilled so as to backfill	yet started. It will be complied during mining
	and reclaim 128.18 ha of de coaled area and the	operation.
	balance being converted into a water reservoir shall be	
	protected by peripheral fencing and the upper benches	
	of the reservoir shall be gently sloped and stabilised	
	with plantation. The proponent shall enter into an MOU from a neighbouring mine to use OB from that project	
	to backfill the void of Utkal-E OCP of 180m depth and a	
	water reservoir shall be created for max depth of	
	35mfromthe surface of the quarry.	
(xv)	Regular monitoring of groundwater level and quality	Regular monitoring of ground water level and quality
(AV)	shall be carried out by establishing a network of existing	will be done as per the guidelines and stipulated
	wells and construction of new piezometers. The	condition. Collected data will be submitted to the
	monitoring for quantity shall be done four times a year	Ministry of Environment & Forests and to the Central-
	in pre-monsoon (May), monsoon (August), post-	Pollution Control Board quarterly within one month
	monsoon (November) and winter (January) seasons	of monitoring after commencement of mining
	and for quality in May. Data thus collected shall be	activities. Currently mining operation not yet started
	submitted to the Ministry of Environment & Forests	in Utkal E Coal Mine.
	and to the Central-Pollution Control Board quarterly	
	within one month of monitoring.	
(xvi)	The use of water from River Singhada Jhor to meet 760	Mining operation not yet started. It will be complied
	m3/d of peak water req. for the project shall be for an	during mining operation.
	initial period of 5 years only. Water (20 m3/d) for	
	drinking shall be met from River Singhada Jhor instead	
	of ground-water for the initial period of 5 years and	
	thereafter the proponent shall use treated minepit	
	water only for the project. Any additional water	
	requirement envisaged shall be obtained by	
	recycle/reuse to the maximum extent and from	
	rainwater harvesting measures.	
(xvii)	The Company shall put up artificial groundwater	Currently mining operation not yet started. Artificial
	recharge measures for augmentation of groundwater	groundwater recharge system will be installed in case
	resource in case the water table shows a declining	the water table shows a declining trend during mining
	trend. The project authorities shall meet water	operation.
	requirement .of nearby village(s) in case the village	Water will be supplied to nearby village(s) by tankers
	wells go dry due to dewatering of mine.	in case the village wells go dry due to dewatering of
(vv.i::\	Sowage treatment plant shall be installed in the sales.	Utkal E coal mine.  Currently mining operation not yet started. Sewage
(xviii)	Sewage treatment plant shall be installed in the colony. ETP shall also be provided for workshop and CHP	treatment plant will be installed in the colony. ETP will
	wastewater. The water shall be reused and recycled for	be provided for workshop and CHP wastewater.
	the mining operations and for green belt development.	Treated water will be reused and recycled for the
	and mining operations and for green beit development.	mining operations and for green belt development. It
		will be complied after start of mining activities.
(xix)	Besides carrying out regular periodic health check-up of	Mining operation not yet started. It will be complied
\^\\\	their workers, 10% of the 'workers identified from	during mining operation.
	workforce engaged in active mining operations shall be	6 F
	subjected to health check-up for occupational diseases	
	and hearing impairment, if any, through an agency such	
	as NIOH, Ahmedabad within a period of one year and	

S No.	Conditions	Status / Remark
(xx)	For monitoring land use pattern and for post mining	Mining operation not yet started.
	land use, a time series of land use maps, based on	However digital remote sensing study report was
	satellite imagery (on a scale of. 1: 5000) of the core	submitted to MOEFCC for Utkal D & Utkal E Coal Mine
	zone and buffer zone, from the start of the project until	vide our letter number NBC/ED(P&T)/1819 dated
	end of mine life shall be prepared once in 3 years (for-	09.05.2024.
	any one particular season which is consistent in the	
	time series), and the report submitted to MOEF and its Regional office at Bhubaneshwar.	
(xxi)	A detailed Final Mine Closure Plan along with details of	Currently mining operation not yet started. A detailed
(XXI)	Corpus Fund shall be submitted to the Ministry of	Final Mine Closure Plan along with details of Corpus
	Environment & Forests 5 years before closure of the	Fund will be submitted to the Ministry before 5 years
	mine. Habitat restoration shall involve a mix of species	of closure of the mine.
	along with bamboo, grasslands at the time of	
	progressive and final mine closure to ensure that at the	
	post mining stage the habitat is restored with species	
	found in the study area remaining stage.	
(xxii)	R&R for 417 PAF's from 2 villages- Nandichhod (405)	Currently mining operation not yet started. It will be
	and Gopinathpur (12) and land oustees involving 311	complied accordingly.
	PAF's from 2 villages- Kosala (150) and Korada (161)	
	shall be prepared and implementation within a	
	specified time-frame of Dec.2020. R&R norms shall be	
	not- less that of the National R&R Policy. R&R shall	
	include annuities for the vulnerable population aged,	
	homeless, differentially abled, etc. and also training programmes and skill development schemes for	
	alternate livelihood for those not being given	
	employment. A Corpus Fund shall be created for the	
	general maintenance for the R&R colony. The status of	
	R&R shall be regularly uploaded on the company's	
	website.	
(xxiii)	The proponent shall undertake a pre-mining survey on	Agreed and will be implemented accordingly.
	the socio-economic status of the local communities	Currently mining operation not yet started in Utkal E
	based on the UNHDR and shall monitor the impact of	Coal Mine.
	CSR activities over the life of the project. Project	
	specific CSR activities for the neighbouring villages	
	being covered under CSR shall be provide for capital	
	costs for CSR activities and a minimum Rs. 1 crore annual revenue expenditure or Rs. 5/tonne of coal whichever is higher (after adjusting for depreciation in value of rupee) towards various CSR activities undertaken over the life of the project. In addition, an amount of Rs 225 Lakhs shall be used for improvement	
	of road connectivity to villages near the project site.	
	The status of each of the activities for each of the	
	villages shall be regularly uploaded fat least twice in a	
	year) on the company's website.	
В	General Conditions	
(i)	No change in technology and scope of working shall be	Currently mining operation not yet started. No
(1)	made without prior approval of the Ministry of	change in technology and scope of working will be
	environment and Forests	made without prior approval of the Ministry of
		environment and Forests.
		1
(ii)	No change in calendar plan including quantum of	No change in calendar plan including quantum of

S No.	Conditions	Status / Remark
		during mining operation. Currently mining operation
		not yet started.
(iii)	Four Ambient Air Quality Monitoring station should be established in the core zone as well as in the buffer zone for monitoring air quality. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the SPCB, Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr in particulates shall be carried out at least once in six months.	Currently mining operation not yet started.
(iv)	Data on ambient air quality and heavy metals such as Hg, As, Ni, Cr etc. and other monitoring data shall be regularly submitted to the Ministry including its Regional Office, BBSR and to the SPCB and the CPCB once in six months. Random verification of samples through analysis from independent laboratories recognizes under the EP rUles,1986 shall be furnished as part of the compliance report.	Mining operation not yet started. Air Ambient Quality (SPM, RPM, $SO_2$ and $NO_x$ ) and heavy metals such as Hg, As, Ni, Cr etc will be submitted once in six months to the MOEF including its Regional Office at Bhubaneswar and to SPCB and CPCB once in six months. Sampling and analysis will be done by NABL accredited agency.
(v)	Adequate measures shall be taken for control of noise levels below 85dB(A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM etc shall be provided with ear plugs/Muffs.	Currently mining operation not yet started. Adequate measures will be taken for control of noise levels below 85 dB(A) in the work environment. Ear plug /muff will be provided to workers/person engaged in blasting and drilling operations, operation of HEMM etc during mining operation.
(vi)	Industrial waste water (workshop and waste water from mine) shall be properly collected, and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 as amended from time to time before discharge. Oil and grease trap should be installed before discharge of workshop effluents.	Currently mining operation not yet started. Industrial waste water from workshop and mine will be properly collected and treated so as to conform to the standards including for heavy metals before discharge to outside during mining operation.
(vii)	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation the mineral shall be covered with tarpaulins and optimally loaded.	Currently mining operation not yet started. Vehicular emissions will be kept under control and will be monitored regularly during mining operation. Vehicles used for transportation of coal will be loaded optimally and will covered with tarpaulins during mining operation.
(viii)	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and types of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analyzed through a laboratory recognized under EP Rules, 1986.	Currently mining operation not yet started. Monitoring of environmental quality parameters will be carried out through establishment of adequate number and types of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board. All the parameters will be analyzed through a laboratory recognized under EP Rules, 1986.
(ix)	Personnel working in dusty areas shall wear protective respiration devices and they shall also be provided with adequate training and information on safety and health aspects.  Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Currently mining operation not yet started. It will be complied after operation of mining activities.

S No.	Conditions	Status / Remark
(x)	A separate environmental management cell with	A separate environmental management cell is setup
	suitable qualified personnel shall be set up under the	with suitable qualified personnel under the control of
	control of a Senior Executive, who will report directly to	a Senior Executive, who is reporting directly to the
	the Head of the company.	Head of the company.
(xi)	The funds earmarked for environmental protection	Environment management fund will be kept separate
	shall be kept in separate account and should not be	and expenditure details will be sent to the Ministry
	diverted for other purpose. Year wise expenditure shall	and its Regional Office at Bhubaneswar after
	be reported to this Ministry and its Regional Office at	commencement of mining operation. Currently
/ …	Bhubaneswar.	mining operation not yet started.
(xii)	The Project Authorities should advertise at least in two	Complied.
	local newspaper widely circulated around the project,	
	one of which shall be in the vernacular language of the	
	locality concerned within seven days of the clearance	
	and a copy of the clearance letter is available with the state pollution control Board and may also be seen at	
	the website of the MOEF at http://envfor.nic.in	
(xiii)	A copy of the environmental clearance letter shall be	Copies submitted to local Panchayat Offices of the
(XIII)	marked to concerned Panchayat, Municipal	project affected villages.
	Corporation or Urban Local Body and Local NGO, if any,	project arrected vinages.
	from whom any suggestion/representation has been	
	received while processing the proposal. A copy of the	
	clearance letter shall also be displayed on the	
	company's website.	
(xiv)	A copy of the clearance letter shall be displayed on the	Not Applicable
(//	website of the concerned State Pollution Control	
	Board. The EC letter shall also be displayed at the	
	Regional Office, District Industry center and Collector's	
	Office/Tehsildar's Office for 30 days.	
(xv)	The clearance letter shall be uploaded on the	Currently mining operation not yet started. However
	company's website. The compliance status of the	Environment Clearance letter and Half Yearly
	stipulated EC conditions shall also be uploaded by the	compliance report are available in NALCO website
	project authorities on their website and updated at	https://nalcoindia.com/sustainability/environment-
	least once every six months so as to bring the same in	status/environment-status-coal-mines/.
	the public domain. The monitoring data of the	
	environmental quality parameters (air, water noise and	
	soil) and critical pollutants and critical sectoral	
	parameters shall also be displayed at the entrance of	
	the project premises and mines office and in corporate	
,	office and on the company's website.	
(xvi)	The project proponent shall submit six monthly reports	Complied. Six monthly compliance report is being
	on the status of compliance of the stipulated	submitted to Regional Office of the MoEFCC, the
	environmental clearance conditions (both in hard copy	respective Zonal offices of CPCB and the SPCB. Last
	and in e-mail) to the respective Regional Office of the	report was submitted vide our letter no. NBC/ED(Proj
	MoEF, the respective Zonal offices of CPCB and the	& Tech)/1462 dated 21.11.2023.
/va::\	SPCB.  The Regional Office of this Ministry located at	Doint noted Full connection will be provided to the
(xvii)	Bhubaneswar shall monitor compliance of the	Point noted. Full cooperation will be provided to the officers(s) of the Regional Office by furnishing the
	stipulated conditions. The Project Authorities shall	requisite data/ information/ monitoring reports as
	extend full cooperation to the officers(s) of the	and when required.
	Regional Office by furnishing the requisite	and when required.
	data/information/monitoring reports.	
(xviii)	The environmental statement for each financial year	Currently mining operation not yet started. It will be
(VAIII)	ending 31st March in Form-V is mandated to be	complied after commencement of mining activities.
	submitted by the project proponent to the concerned	complica arter commencement of mining activities.
	State Pollution Control Board as prescribed under the	
	State Foliation Control Board as prescribed under the	

S No.	Conditions	Status / Remark
	Environment (Protection) Rules, 1986, as amended	
	subsequently, shall also be uploaded on the company's	
	website along with the status of compliance of EC	
	conditions and shall be sent to the respective Regional	
	Offices of the MoEF by E-mail.	