NATIONAL ALUMINIUM COMPANY LIMITED

(A Government of India Enterprise)

COAL MINES DIVISION S&P COMPLEX, Angul

EMAIL:: sudhansu.patra@nalcoindia.co.in, gm_uecb@nalcoindia.co.in

Ref No: NALCO/Coal Mines Division/2014/2024

Date: 16.11.2024

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 Apr'24 to Sep'24.

Ref:

- 1. Environment Clearance of Utkal-E Coal Mines vide letter no. J-11015/31/2007-IA.II(M) dated 10.12.2009.
- 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 Apr'24 to Sep'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

> S S Patra GGM (Coal Mines)

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@ric.in)
- 3. Zonal Office, Central Pollution Control Board, Southern Conclave, Block 502, 5th & 6th Floor, 1582 Rajdanga Main Road, Kolkata, WB 700107 (email: rdkolkata.cpcb@gov.in)
- 4. 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 (APRIL 2024 TO SEPTEMBER 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	Status, Hemani
(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. Stage I forest clearance of balance 13 ha (169.1779 – 156.1779) obtained vide no. FP/OR/MIN/QRY/456337/2023 dated 20.08.2024.
(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 period to allow proper settling of silt material.	
(vii)	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.	Mining operation not yet started in Utkal E Coal Mine. Dimension of retaining walls at the toe of the dumps and OB benches within the mine to check run-off and siltation will be designed based on the rainfall data.
(viii)	Crushers at the CHP shall be operated with high. Efficiency bag filters, water sprinkling system shall be provided to check fugitive. emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.	Currently mining operation not yet started. Crushers at the CHP will be operated with high efficiency bag filters. Water sprinkling system will be provided to check fugitive emissions generated during crushing operations, conveyor system, haulage roads, transfer points, etc.
(ix)	No washery shall be established in the coalmine project site without prior environmental clearance from this Ministry.	Mining operation not yet started in Utkal E Coal Mine. Point noted. Washery will not be installed in coal mine without prior environmental clearance from Ministry.
(x)	Drills shall be wet operated only.	Currently mining operation not yet started. Wet type drilling will be used during drill operation.
(xi)	A project specific Conservation Plan for the endangered Schedule-I and II fauna including the Indian Elephant and for the medicinal plants found in and around the project area shall be prepared and implemented in 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.	Project specific Conservation Plan was prepared and submitted to MoEF&CC along with FDP of Utkal E coal mines.
(xii)	The total area brought under afforestation shall not be less than 434.56 ha and include backfilled area (128.18 ha), OB dumps (381.02 ha), topsoil dump (91.87 ha), along ML boundary (15.99 ha), infrastructure (4.83 ha), barriers (2.37 ha) and along roads (19.50 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.	Mining operation not yet started. Plantation will be carried out in phase wise manner as per the plan. Local / native species will be planted in consultation with the local DFO/Agriculture Department. The density of the trees will be around 2500 plants per ha.
(xiii)	A 3-tier green belt of an area of 25.17 ha shall be developed within 3 years of start of project (including: period for construction) using a mix of native: species. Avenue plantation using local species shall also be 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.	3-tier green belt will be developed within 3 years of start of project using a mix of native species. Currently mining operation not yet started.

S No.	Conditions	Status / Remark
(xiv)	A Progressive Mine Closure Plan shall be implemented and OB generated shall be backfilled so as to backfill and reclaim 128.18 ha of de coaled area and the 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.	Agreed and shall be complied. Mining operation not yet started. It will be complied during mining operation.
(xv)	Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the Ministry of Environment & Forests and to the Central-Pollution Control Board quarterly within one month of monitoring.	Regular monitoring of ground water level and quality is being done with 10 km radius as per the guidelines and stipulated condition. Collected data is being submitted to the Ministry of Environment & Forests and to the Central-Pollution Control Board quarterly basis. Currently mining operation not yet started in Utkal E Coal Mine.
(xvi)	The use of water from River Singhada Jhor to meet 760 m3/d of peak water req. for the project shall be for an 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.	Mining operation not yet started. It will be complied during mining operation.
(xvii)	The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case the water table shows a declining trend. The project authorities shall meet water requirement .of nearby village(s) in case the village wells go dry due to dewatering of mine.	Currently mining operation not yet started. Artificial groundwater recharge system will be installed in case the water table shows a declining trend during mining operation. Water will be supplied to nearby village(s) by tankers in case the village wells go dry due to dewatering of Utkal E coal mine.
(xviii)	Sewage treatment plant shall be installed in the colony. ETP shall also be provided for workshop and CHP wastewater. The water shall be reused and recycled for the mining operations and for green belt development.	Currently mining operation not yet started. Sewage treatment plant will be installed in the colony. ETP will be provided for workshop and CHP wastewater. Treated water will be reused and recycled for the 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 their workers, 10% of the 'workers identified from workforce engaged in active mining operations shall be 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 the results reported to this Ministry and to DGMS.,	Mining operation not yet started. It will be complied during mining operation.
(xx)	For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on a scale of. 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhubaneshwar.	Mining operation not yet started. However digital remote sensing study report was submitted to MOEFCC for Utkal D & Utkal E Coal Mine vide our letter number NBC/ED(P&T)/1819 dated 09.05.2024.

S No.	Conditions	Status / Remark
(xxi)	A detailed Final Mine Closure Plan along with details of	Currently mining operation not yet started. A detailed
	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	
(vocii)	found in the study area remaining stage. R&R for 417 PAF's from 2 villages- Nandichhod (405)	Currently mining appration not yet started It will be
(xxii)	and Gopinathpur (12) and land oustees involving 311	Currently mining operation not yet started. It will be complied accordingly.
	PAF's from 2 villages- Kosala (150) and Korada (161)	complied accordingly.
	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 based on the UNHDR and shall monitor the impact of	Currently mining operation not yet started in Utkal E Coal Mine.
	CSR activities over the life of the project. Project	Coal Mille.
	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	
В	year) on the company's website. General Conditions	
	deficial conditions	
(i)	No change in technology and scope of working shall be	Currently mining operation not yet started. No
	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.
(ii)	No change in calendar plan including quantum of	No change in calendar plan including quantum of
	mineral coal and waste being produced shall be made.	mineral coal and waste being produced will be made
		during mining operation. Currently mining operation
/:::\	Four Ambient Air Quality Manitoring station should be	not yet started.
(iii)	Four Ambient Air Quality Monitoring station should be established in the core zone as well as in the buffer	Currently mining operation not yet started.
	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.	
(iv)	Data on ambient air quality and heavy metals such as	Mining operation not yet started. Air Ambient Quality
	Hg, As, Ni, Cr etc. and other monitoring data shall be	(SPM, RPM, SO ₂ and NO _x) and heavy metals such as
	regularly submitted to the Ministry including its	Hg, As, Ni, Cr etc will be submitted once in six months
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S No.	Conditions	Status / Remark
	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.	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 th May, 1993 and 31 st 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.
(x)	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.	A separate environmental management cell is setup with suitable qualified personnel under the control of a Senior Executive, who is reporting directly to the Head of the company.
(xi)	The funds earmarked for environmental protection shall be kept in separate account and should not be diverted for other purpose. Year wise expenditure shall be reported to this Ministry and its Regional Office at Bhubaneswar.	Environment management fund will be kept separate and expenditure details will be sent to the Ministry and its Regional Office at Bhubaneswar after commencement of mining operation. Currently mining operation not yet started.
(xii)	The Project Authorities should advertise at least in two 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	Complied.
(xiii)	A copy of the environmental clearance letter shall be marked to concerned Panchayat, Municipal Corporation or Urban Local Body and Local NGO, if any,	Copies submitted to local Panchayat Offices of the project affected villages.

S No.	Conditions	Status / Remark
	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 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.	Not Applicable
(xv)	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in 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.	Currently mining operation not yet started. However Environment Clearance letter and Half Yearly compliance report are available in NALCO website https://nalcoindia.com/sustainability/environment-status/environment-status-coal-mines/.
(xvi)	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MoEF, the respective Zonal offices of CPCB and the SPCB.	Complied. Six monthly compliance report is being submitted to Regional Office of the MoEFCC, the respective Zonal offices of CPCB and the SPCB. Last report was submitted vide our letter no. NBC/ED(P&T)/1865 dated 29.05.2024.
(xvii)	The Regional Office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The Project Authorities shall extend full cooperation to the officers(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Point noted. Full cooperation will be provided to the officers(s) of the Regional Office by furnishing the requisite data/ information/ monitoring reports as and when required.
(xviii)	The environmental statement for each financial year ending 31 st March in Form-V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the 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.	Currently mining operation not yet started. It will be complied after commencement of mining activities.