

**MCDR Inspection Report 2023-24****General:**

Sl No.	Particulars	Details
1	Name of the Mine	Nandini Khundini Limestone Mines
2	Date of Inspection:	20.12.2024
3	Name of Inspecting Officer	Shri Prem Prakash, RCOM
4	Name of official accompanying inspection	Shri Mukesh Prasad, Mines Manager
5	Last date of Inspection & Officer	04.12.2023 & Shri D. Upadhyay, DCOM
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Area - 53.57 Ha Forest Area – 0.0 Ha Non-Forest Area- 53.57 Ha
7	Mine code	38CHG05024
8	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/256/2011
9	Name of the Lessee, Address, Phone, email and fax number	ACC Limited Cement House, 121, Maharshi Karve Road, Mumbai - 400020 Phone: 02267973967/9820070057 Email: ajay.kapur@adani.com
10	Village	NANDINI KHUNDINI
11	Taluka/Mandal	AHIWARA
12	District	DURG
13	Pin code	490036
14	State	CHHATTISGARH
15	Post Office	AHIWARA
16	Nearest Police Station	NANDANI KHUNDINI
17	Nearest Railway Station	BHILAI POWERHOUSE
18	Date of Grant of Mining Lease	09.11.2008
19	Date of Execution	02.12.2008
20	Weekly day of rest	(SUNDAY)
21	Date of opening of Mine	20.09.2016
22	Date of First Renewal, if applicable and its period & expiry	NA
23	Date of Second Renewal, if applicable and its period & expiry	NA
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri. Ajay Kapur, ACC Limited, Adani Corporate House, Shantigram, S.G. Highway, Khodiyar, Gandhinagar, 382421; Gujarat Date of appointment:03/12/2022 Email: ajay.kapur@adani.com
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri. Sudipta Mondal, Agent & Chief Plant Manager, Jamul cement Works, ACC Limited

		Email: sudipta.mondal@adani.com Date of appointment: 01/04/2024
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri. Mukesh Prasad, Nandini Khundini Limestone Mines, Jamul Cement Works, ACC Limited, Email:boddu.anubhushanraju@adani.com, Mob: 9893024204, Date of appointment: 17.09.2024
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri. B. A, Raju, Nandini Khundini Limestone Mines, Jamul Cement Works, ACC Limited, Email:MUKESH.DINESH.PRASAD@adani.com, Mob: 8919114282, Date of appointment: 18.09.2024
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Yes, Geologist & mining engineer is appointed as per Rule 55 & carrying out their duties as per Rule 56 & 57 of MCDR, 2017
30	Date of Approval of Review/Scheme of Mining/Modified Review/Scheme of Mining with five-year period and specific condition in approval letter, if any.	DOA: 18.01.2024 RPR/DURG/LIMESTONE/1412/MRMP/2023-24, Proposal Period-2023-24 to 2027-28
31	Mineral(s) granted in lease and approved for Mining	LIMESTONE
32	Method of Mining (Opencast, Underground)	OPENCAST
33	Category (Fully Mechanized, Others or Manual)	FULLY MACHANIZED Category-A
34	Captive/Non-Captive	CAPTIVE

## Scientific Mining: Compliance of proposals of approved Mining Plan/Review of Mining Plan:

### 1.0 Exploration:

S.N.	Item	Proposals (2023-24)	Actual (2023-24)	Remarks
1a	Backlog of previous year proposals	Nil	Nil	As per approved RMP
1b	Exploration over lease area for Geological axis 1 or 2.	No exploration has been proposed in the approved Review of Mining Plan during F.Y. 2023-24	Nil	Entire potential mineralized area has been explored under G-1
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	No proposal	Not Applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	No proposal	Not Applicable	
1e	Balance reserves as on 01.04.2024 (in Million Tonnes)	Under 111- 30.98 Million Tonne		As per information submitted in Annual Return 2023-24
1f	General remarks of Inspecting officer on geology, exploration etc.	No exploration has been proposed during the financial year 2023-24. The entire potential mineralized area of 53.57 Ha. has been explored under G-1 level of exploration as per approved Modification of Review of Mining Plan.		

### 2.0 Development:

S. N.	Item	Proposals (2023-24)	Actual (2023-24)	Remarks
2a	Location of Development w.r.t. lease area	Latitude: 21°22'57.35"N 21°22'50.46"N Longitude: 81°23'25.34"E 81°23'23.66"E	Carried out within the proposed area	
2b	Separate benches in topsoil overburden and mineral	Separate benches proposed in overburden & mineral	Separate benches were maintained in overburden & mineral	
2c	Stripping ratio or ore to OB ratio(M <sub>3</sub> /t)	1: 0.1139	1: 0.1125	Tonne:Cum
2d	Quantity of topsoil generation in m <sup>3</sup>	No proposal	Nil	
2e	Quantity of overburden generation in m <sup>3</sup>	112500	77081	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	The pit developments have been carried out within the proposed area as approved in Mining Plan.		

**3.0 Exploitation:**

S. N.	Item	Proposals (2023-24)	Actual (2023-24)	Remarks
3a	Number of pits proposed for production	01 Nos.	01 Nos.	
3b	Quantity of ROM mineral production proposed in Tonne	988100	685015.1	ROM mineral production is less reportedly due to less requirement of the captive plant.
3c	Recovery of Saleable/Usable mineral from ROM production in Tonne	100 %	100 %	
3d	Quantity of mineral reject generation in Tonne	No proposal	Nil	No mineral reject generated
3e	Grade of mineral reject generation and threshold value declared	No proposal	Nil	
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	Nil	
3h	Manual/Mechanized method adopted for segregation from ROM	No proposal	Nil	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	No such study carried out	
3j	Provision of drilling & blasting in mineral benches	Drilling and Blasting proposed	Drilling and blasting were carried out in mineral benches as proposed	
3k	Provision of mining machineries in mineral benches	Yes, HEMMS	HEMMs deployed	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in Mining Plan	Bench height for OB= 2 M Limestone = 8 M	Yes, suitable	
3m	Total area covered under excavation /pits in Ha.	24.82 Ha. up to the end of plan period FY 2027-28	18.66 Ha. up to end of FY 2023-24	
3n	Ore to OB ratio for the pit/mine during the year	1:0.1139	1:0.1125	Tonne:Cum
3o	Total area put in use under different heads at the end of year in Ha.	41.03 Ha. up to the end of plan period 2027-28	About 29.78 Ha. up to end of FY 2023-24	
3p	Production of ROM mineral during last five-years period, as Applicable (Tonne)	2019-20: 505522 2020-21: 508095 2021-22: 524509 2022-23: 505398	2019-20: 453473.48 2020-21: 140198.39 2021-22: 426651.50 2022-23: 504980.04	(All units in MT) As per AR submitted

		2023-24: 988100	2023-24: 685015.10	
3q	General remarks of inspecting officer on method of mining etc.	Open cast working is being carried out by deployment of HEMM with the help of drilling & blasting. Less production is reportedly due to captive plant's requirements.		

#### 4.0 Solid Waste Management-Dumping:

S.N.	Item	Proposals (2023-24)	Actual (2023-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject	Separate duping of over burden proposed	Being done as per proposal	
4b	Location of topsoil, OB & mineral reject dumps	OB dump no. D-5, Location Latitude (dd:mm:ss:ss) 21:22:57.35 to 21:22:50.46 Longitude (dd:mm:ss:ss) 81:23:25.34 to 81:23:23.66  OB dump no D-1, Location Latitude (dd:mm:ss:ss) 21:23:09.04 to 21:23:04.37 Longitude (dd:mm:ss:ss) 81:23:07.69 to 81:23:20.33	Carried out at the earmarked location	
4c	Number of dumps within lease area and outside lease area	With in ML-05	With in ML-05	
4d	Location of dumps w.r.t. ultimate pit limit	Beyond UPL	Beyond UPL	
4e	Number of active & alive dumps	05	05	
4f	Number of dead dumps	No proposal	Nil	
4g	Number of dumps stabilized	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Proposed	Not constructed fully	Violation under Rule 11(1) of MCDR, 2017 pointed out
4i	Length of Retaining wall or garland drain all along dump	100m retaining wall proposed & 500m of garland drain	Not constructed	Violation under Rule 11(1) of MCDR, 2017 pointed out
4j	Number of settling ponds	No proposal	Nil	

4k	Specific commends of inspecting officer on waste dump management	Environmental protection measures around the lower periphery of the waste dump D-1 have not been found constructed. Hence, violation under Rule 11(1) of MCDR, 2017 pointed out.
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### 5.0 Solid Waste Management-Backfilling:

S.N.	Item	Proposals (2023-24)	Actual (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil	No area is mined out fully for backfilling purposes
5b	Area under backfilling of mined out area	No proposal	Nil	-do-
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	No proposal	Nil	-do-
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	-do-
5e	General remarks of inspecting officer on backfilling, reclamation etc.	The area is not fully exhausted for backfilling, reclamation etc. purposes.		

### 6.0 Progressive Mine Closer Plan:

S. N.	Item	Proposals (2023-24)	Actual (2023-24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 26 (2)	To be submitted before 01st July every year	PMCP report received in time.	Annual Report submitted on 21.06.2023
6b	Management of worked/mined out benches	No proposal	Nil	No area is mined out at present
	Area available for rehabilitation (Ha)			
	Afforestation done (ha)			
	No. of saplings planted during the year			
	Cumulative no. of plants			
	Any other specific method of rehabilitation			
Cost incurred on watch & care during the year				
6c	Compliance on reclamation and rehabilitation by backfilling Voids available for backfilling (L*B*D) Void filled by waste/tailings Afforestation on the backfilling Rehabilitation by making water reservoir Any other specific means	No proposal	Nil	No backfilling proposal
6d	Compliance of Rehabilitation of waste land within lease	No proposal	Nil	

	i. Afforestation ii. Area rehabilitation (ha) iii. Method of rehabilitation			
6e	Compliance of Environment monitoring (core zone & buffer zone)	Environmental monitoring of air, water & noise proposed	Environmental monitoring of air, water & noise was carried out	All values of environment monitoring were within permissible limits
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Annual PMCP report has been submitted. No any part of ML area got fully exhausted for backfilling purposes.		

### 7.0 Mineral Conservation:

S.N.	Item	Proposals (2023-24)	Actual (2023-24)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	ROM mineral dispatch	ROM mineral dispatch	
7b	Method of grade-wise mineral sorting i.e. Manual or Mechanical	ROM mineral to be fed to crusher plant	ROM is being fed to the crusher for further sizing & dispatched to their captive cement plant	
7c	Different grade of mineral sort out at mine	Blending by mechanized method	Bench wise blending as per the requirement of the cement plant	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The run of mine ore is fed to crushers for sizing for feeding to the cement plant.		

### 8.0 Environment:

S.N.	Item	Proposals (2023-24)	Actual (2023-24)	Remarks
8a	Separate removal and utilization of topsoil	No proposal	Nil	No proposal for removal of topsoil
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden waste rock, rejects and fines	Separate dumps for overburden/waste proposed	Separate dumps maintained	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	No proposal	Nil	

8f	Baseline information on existence of plantation & additional plantation done	300 saplings	454 saplings within lease area	
8g	Survival rate (%)	85%	85%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul roads proposed to suppress the dust	Continuous water sprinkling done on haul roads by water tankers	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Aesthetic beauty in & around the mine area was good.		

### 9.0 Compliance of Rule 45:

S N	Item	Comments		Remarks
9a	Status of submission of monthly and Annual returns	MR Submitted upto Jan_2025		
		AR Submitted till Year 2023-24		
S. N .	Item	Details Given in A.R	Observation of I/Officer	Remarks
9 b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager-Deepak Kumar Mining Engg-Deepak Kumar Geologist - Shishir Gaur	Employed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Total Area= 27.98 Ha. up to 2023-24	Total Area= 27.98 Ha. up to 2023-24	
9 d	Scrutiny of Annual return on afforestation	Within lease area 454 nos. @ 85% survival rate	Within lease area 454 nos. @ 85% survival rate	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	No generation of mineral rejects reported	
9f	Scrutiny of Annual return on ROM stock and/or grade ore	ROM Opening stock-Nil Production-685015.10 Closing stock-Nil	ROM Opening stock-Nil Production-685015.10 Closing stock-Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Ex. Mine price and cost of production – Rs. 238.65 /Tonne Sale value-Nil	Captive consumption	
9i	Scrutiny of Annual return on Fixed assets	Rs. 43791661/- including land, building, plant and machinery etc.	Rs. 43791661/- including land, building, plant and machinery etc.	
9 k	Scrutiny of Annual return on mining Machineries	Shovel -02 nos, Dumper-26 nos., Drill Machine-02 nos., Wheel Loader-01 nos.,	Deployed	

**10. Details of violations observed during current inspection:** - Violation of Rule 11(1) of MCDR 2017 is pointed out after current inspection.

**11. Analysis of DAI and submission of the scrutiny reports in the MISPAS portal.**

As per the directives issued by the CCOM (I/C) dated 23.09.2024, the digital imageries (Drone Data) submitted by the lessee has been analysed and uploaded the scrutiny report/briefing as per the specified format in the online portal (i.e. MIDPAS).

प्रेम प्रकाश / Prem Prakash

क्षेत्रीय खान नियंत्रक / Regional Controller of Mines

भारतीय खान ब्यूरो, रायपुर / Indian Bureau of Mines, Raipur