

## MCDR INSPECTION REPORT 2022-23

### General:

Sl .No.	Particulars	Details
File No.		CHG/BBR/LST-01/NGP
1	Name of the Mine	Risda-Kukurdi Limestone Mine
2	Date of Inspection	06.09.2023
3	Date of Last Inspection & Officer	09.09.2022, Shri Arun Kumar, RCOM
4	Name of Inspecting Officer	Shri D. Dash, Regional Mining Geologist Raipur
5	Name of official accompanying inspection	Shri Ajay Khare, Mines Manager Shri Pankaj Sharma, Geologist
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease area -395.05 Ha. Forest Area – 0.00 Ha.
7	Mine code	38CHG19001
8	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/16679/2013
9	Name of the Lessee, Address, Phone, email and fax number	NU Vista Limited, Village-Risda, Tehsil-Balodabazar District-Balodabazar-Bhatapara State-Chhattisgarh, Pin code- 493332 Phone- 07727-223033, Fax-07727-223033 Email-ajay.khare@nuvoco.com
10	Village	Risda
11	Taluka/Mandal	Balodabazar
12	District	Balodabazar-Bhatapara
13	Pin code	493332
14	State	Chhattisgarh
15	Post Office	Risda
16	Nearest Police Station	Balodabazar
17	Nearest Railway Station	Bhatapara
18	Date of Grant of Mining Lease	09.09.2008
19	Date of Execution	08.09.2009
20	Weekly day of rest	Staggered
21	Date of opening of Mine	07.08.2013
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	Date of Grant of lease -08.09.2009; Date of Expiry on-07.09.2059
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Jaykumar Krishnaswamy , Date of appointment 02.12.2020, Equinox Business park, Tower 3, East Wing, 4 <sup>th</sup> Floor, LBS Marg, Kurla (west) Mumbai, Maharastra- 400070. Email-jayakumar.krishnaswamy@nuvoco.com
26	Name of the Mine Agent with Address, phone, email, fax number and date of	Shri Raju Ramchandran, Village-Risda, NU Vista, Tehsil-Balodabazar

	appointment	District-Balodabazar-Bhatapara State-Chhattisgarh, Pin code- 493332 Date of appointment- 14.06.2022, Email- raju.ramchandran@nuvoco.com
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri Ajay Khare, Village-Risda, NU Vista, Tehsil-Balodabazar, District-Balodabazar-Bhatapara State-Chhattisgarh, Pin code- 493332 Date of appointment- 15.05.2020, Phone no. 7247725868, Email-ajay.khare@nuvoco.com
28	Name of the Mining Engineer, & Geologist, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Jayprakash Dwivedi, Total Experience – 19 Years, Village-Risda, NU Vista, Tehsil-Balodabazar District-Balodabazar-Bhatapara State-Chhattisgarh, Pin code- 493332, Date of appointment- 25.05.2017, Phone no. 7583807064 Email- <a href="mailto:jaiprakash.dwivedi@nuvoco.com">jaiprakash.dwivedi@nuvoco.com</a> Shri Pankaj Sharma, Village-Risda, NU Vista, Tehsil-Balodabazar, District-Balodabazar-Bhatapara State-Chhattisgarh, Pin code- 493332, mpbile no. 9522035956, Date of appointment – 10.04.2023 Email- Pankaj.sharma02@nuvoco.com
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes, appointed as per Rule.
30	Date of Approval of Mine Plan/Modified Mine Plan with five-year period and specific condition in approval letter, if any.	Modification in approved review of Mining Plan was approved on 10.01..2020 vide letter no. Letter Approved Number-बलौदाबा/चुप/खचो-1226/2019- रायपुर. for the period of 2020-21 to 2023-24
31	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	NA
32	Mineral(s) granted in lease and approved for Mining	Limestone
33	Method of Mining (Opencast, Underground)	Opencast
34	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
35	Captive/Non-Captive	Captive Mine
36	Present EC Status	9.00 Million Tonne
37	Status of Financial Assurance	Bank Guarantee of Rs. 7,70,16,000/- @ 3,00,000/- per Ha for 256.72 is submitted during approved Mining Plan submission on 10.01.2020. As per Amendment of MCDR , the difference amount of Bank Guarantee no. 0006NDLG00198022 dated 28.01.2022 is submitted of Rs 5,13,44,000/- @ 2,00,000/- per Ha for 256.72 Ha.

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

**1.0 Exploration:**

S.N.	Item	Proposals (2022-23)	Actual Work (202-23)	Remarks
1a	Backlog of previous year proposals	NIL	NIL	NIL
1b	Exploration over lease area for Geological axis 1 or 2.	NIL	NIL	NIL
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not mentioned	NIL	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2.	NIL	NIL	NIL
1e	Balance reserves as on 01.04.2023 (in Million Tonnes)	Proved Mineral Reserve (111) - 211.4 Probabale mineral reserves(122)-16.058 Feasibility Min. Resource (211) – 68.16 Pre-feasi. Min. Resource (222) – 6.86 Inferred Mineral Resource (333) – 44.61		As per Annual Return
1f	General remarks of Inspecting officer on geology, exploration etc.	During the year 2020-21 and 2021-22, exploration in form of 07 & 08 no's of Boreholes were proposed respectively. 15 boreholes have been drilled during the period 2021-22 and thus there is no back log of proposed exploration.		

**2.0 Development:**

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
2a	Location of Development w.r.t. lease area	Pit-1: E: 614394 to E: 614646 N: 2393331 to N: 2393330 CS - R-R' RL 256-230 m Pit-2: E: 614458 to E: 615268 N: 2393481 to N: 2393481 CS, Q-Q', R-R,&S-S' RL 251-220 m Pit-3: E: 614771 to E: 615814 N: 2394082 to N: 2394082 CS H-H' TO ' O-O' RL 252-225 m	Pit-1: E: 614394 to E: 614646 N: 2393331 to N: 2393330 CS - R-R' RL 256-230 m Pit-2: E: 614458 to E: 615268 N: 2393481 to N: 2393481 CS, Q-Q', R-R,&S-S' RL 251-220 m Pit-3: E: 614840 to E: 615736 N: 2394082 to N: 2394081 CS H-H' TO ' O-O' RL 252-225 m	As per proposal.
2b	Separate benches in topsoil overburden and mineral (Rule 15)	One bench in top Soil 1.5 mtrs, One bench in OB- 2.5 mtrs Bench in Ore- 10 mts	One bench in top Soil 1.5 mtrs, One bench in OB- 2.5 mtrs 02 Bench in Ore 10mts 01 nos Bench in ore 6mts	As per proposal.
2c	Stripping ratio or ore to OB ratio	1:0.08	1:0.052	Marginally on lower side

2d	Quantity of topsoil generation in m <sup>3</sup>	192960 m <sup>3</sup>	169946.00 m <sup>3</sup>	Top Soil removal is less due to less advancement of top benches due to EC restriction of 5.5 million tonnes.
2e	Quantity of overburden generation in m <sup>3</sup>	2,88,360 m <sup>3</sup>	243122 m <sup>3</sup>	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	The development of quarry is as per proposal in approved Mining Plan.		

### 3.0 Exploitation:

S. N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
3a	Number of pits proposed for production	3 Pits	3 Pits	
3b	Quantity of ROM mineral production proposed in tonne	89,99,711	45,89,964	EC capacity is only for 5.5 Million Tons.
3c	Recovery of Salable/usable mineral from ROM production tonne	90% Limestone 10% Screen/Mineral Reject	99% Limestone 1% Screen/Mineral Reject	As proposed, limestone handing is less from first bench due to restriction of EC capacity to 5.5 million tonnes .
3d	Quantity of mineral reject generation tonne	899971 Tons	5911.4	Due to working in lower benches.
3e	Grade of mineral reject generation and threshold value declared	Grade of Screen/Mineral reject is less then -34% CaO  As per mining plan Threshold value of limestone is 34% CaO	Screen/Mineral reject CaO 25 to 30 %	Screened rejects are below threshold limit.
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 segregation. Mechanized. Only Crushing proposed	Only Crushing carried out.	1 no of 1200TPH crusher installed as proposed.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	

3j	Provision of drilling & blasting in mineral benches	Sandvik/DX-800 – 100mm dia Sandvik/DP 1500i – 100mm dia Rock Tool – 100mm dia  Slurry & Emulsion Explosive	Sandvik/DX-800 – 100mm dia Sandvik/DP 1500i – 100mm dia Rock Tool – 100mm dia  Slurry & Emulsion Explosive	Slurry & Emulsion Explosive in conjunction with SME/ANFO.
3k	Provision of mining machineries in mineral benches	Shovel PC1250 -3 nos with 6.5CUM Shovel – 2 nos. 1.7CUM  Dumper – 6 nos. 55 tons Dumper – 2 nos. 60 tons Dozer – 320HP	Shovel PC1250 -3 nos with 6.5CUM Shovel – 2 nos. 1.7CUM  Dumper – 6 nos. 55 tons Dumper – 2 nos. 60 tons Dozer – 320HP	As reported in AR 2022-23.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of benches in Top soil – 1.5m OB Bench – 2.5m LST Bench – 10m	Height of benches in Top soil – 1.5m OB Bench – 2.5m LST Bench – 10m	
3m	Total area covered under excavation /pits	132.76 Ha. at the end of plan period (31.03.2024)	97.02 Ha As on 31.03.2023	As reported in AR 2022-23
3n	Ore to OB ratio for the pit/mine during the year	1:0.08 (By Volume)	1:0.052 (By Volume)	
3o	Total area put in use under different heads at the end of year	Current working – 132.76 Ha Reclaimed/rehabilitated – 0.00 Ha Waste & screen reject Dump – 11.25 Ha Top soil storage – 7.40 Ha Infrastructure, crushing & Roads – 19.12 Ha Others (water harvesting, plantation) – 17.0 Ha	Current working – 97.02 Ha Reclaimed/rehabilitated – 0.00 Ha Waste Dump – 7.7 Ha Top soil storage – 4.28 Ha Infrastructure, crushing & Roads – 15.48 Ha Others (water harvesting, plantation) – 22.77 Ha Work done under PMCP – 10.63 Ha	As reported in AR 2022-23.
3p	Production of ROM mineral during last five-years period, as Applicable (tonne)	2017-18: 5500000 2018-19: 5500000 2019-20: 6500325 2020-21: 8249838 2021-22: 8999774 2022-23: 8999711	2017-18: 3169838. 2018-19: 4790760 2019-20: 4627511 2020-21: 4789748. 2021-22: 4480631 2022-23: 4589964	The production during the planned period is on lower side due to lack of demand from the captive cement plant and EC limit of 5 million tonnes.
3q	General remarks of inspecting officer on method of mining etc	The production during the planned period is on lower side due to lack of demand from the captive cement plant and EC limit of 5 million tonnes.		

#### 4.0 Solid Waste Management-Dumping:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Separate dumping proposed for topsoil, OB and screen/mineral reject	Separate dumping of OB and screen/mineral reject are carried out at earmarked location as per the proposal	As per proposal.
4b	Location of topsoil, OB & mineral reject dumps	Topsoil Dump E615775-616345 N2393521-2393494  OB Dump E616033-616211 N2393697-2393864  Screen Reject dump E614337-614529 N2393125-2393270	Topsoil Dump E615873-616195 N2393518-2393501  OB Dump E616057-616239 N2393697-2393831  Screen Reject dump E614439-614476 N2393132-2393162	The topsoil generated used concurrently for plantation. Location as per proposal.
4c	Number of dumps within lease area and outside lease area	2 nos. Soil dump 2 nos. OB dump 1 no screen/mineral reject dump (no dump outside the lease area)	2 nos. Soil dump 2 nos. OB dump 1 no screen/mineral reject dump (no dump outside the lease area)	As per proposal.
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Proposed within UPL	All dumps are within UPL	-do-
4e	Number of Active & Alive dumps	1 no. Top soil dump 1 no. OB dump 1 no. screen/mineral reject	1 no. Top soil dump 1 no. OB dump 1 no. screen/mineral reject	Topsoil used for plantation purpose.
4f	Number of dead dumps	1 no. Top soil dump (N21°38'5.92" E82° 6'24.13")  1 no. OB dump (N21°38'12.97" E 82° 6'22.55")	1 no. Top soil dump (N21°38'5.92" E82° 6'24.13")  1 no. OB dump (N21°38'12.97" E 82° 6'22.55")	As per proposal.
4g	Number of dumps stabilized	1 no. OB dump (N21°38'12.97" E 82° 6'22.55")	1 no. OB dump (N21°38'12.97" E 82° 6'22.55")	Earlier plantation done on two sides of 1 <sup>st</sup> terrace. Total no. of terraces is two.
		1 no. Top soil dump (N21°38'5.92" E82° 6'24.13")	1 no. OB dump (N21°38'12.97" E 82° 6'22.55")	
4h	Whether Retaining wall or garland drain all along dumps are there	No proposal for Retaining Wall. 680m garland drain and 665m toe bund proposed for the year 2022-23	Toe-bund 396m x 2m x 1m Garland Drain 409m x 2m x 1m	Garland drain & toe bund Constructed & carried out for the

				year 2022-23.
4i	Length of Retaining wall or garland drain all along dump	Toe-bund 665m x 2m x 1m Garland Drain 680m x 1m- 2m x 1m Proposed for soil dump	Toe-bund 396m x 2m x 1m Garland Drain 409m x 2m x 1m	Toe bund and garland drain are made along the dump area.
4j	Number of settling ponds	Not proposed	NIL	
4k	Specific comments of inspecting officer on waste dump management	Waste dumping is done as per proposed proposal and on proposed locations.		

### 5.0 Solid Waste Management-Backfilling:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil	No area is fully mined out.
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 (Rule 32)	No proposal	Nil	-do-
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	-do-
5e	General remarks of inspecting officer on backfilling, reclamation etc	No area is fully mined out. Thus there is no scope for backfilling of mined land.		

### 6.0 Progressive Mine Closer Plan:

S.N	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
6a	Whether Annual report on PMCP submitted on time and Correctly-Rule 26 (2). Details should be given in the format as given in Annexure-20	To be submitted before 1st of July every Year	Annual PMCP report Submitted on 28.06.2023 by mail and hardcopy submitted by post	
6b	Area available for rehabilitation (Ha)	No Proposal	Nil	
	Afforestation done (ha)	1.94 Ha	2.88 Ha	
	No. of saplings planted during the year	2156 Nos samplings proposed within lease	14290 Nos. saplings planted within lease and 14356 nos saplings planted outside the lease area	As reported in AR
	Cumulative no. of plants	--	70828 nos. sapling within lease area	-do-

	Any other specific method of rehabilitation	No Proposal	Nil	
	Cost incurred on watch & care during the year	Not given in approved document	--	
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 area is mined out.
6d	Compliance of Rehabilitation of waste land within lease i. Afforestation ii. Area rehabilitation (ha) iii. Method of rehabilitation	No Proposal	Nil	
6e	Compliance of Environment monitoring (core zone & buffer zone)	Environmental monitoring proposed	Environmental monitoring carried out. Air quality, Surface Water, Ground water, Noise level & Dust monitoring carried out. All parameters are within limits	Environmental monitoring Report from April-22 to March-2023 available. It is done by Vardan EnviroLab, Gurugram.
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Plantation of 14290 saplings have been done within the lease area during the year 2022-23 with cumulative plantation of 70828 nos.		

### **7.0 Mineral Conservation:**

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	No sorting proposed. Only Crushing proposed	Crushing carried out for sizing of the ore	1 crusher of 1200 TPH installed
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No grade wise Mineral sorting proposed. Only Mechanised crushing Proposed.	Mechanised crushing carried out as per the proposal	As per proposal.
7c	Different grade of mineral sort out at mine	No Proposal	Nil	Not done.
7d	Any beneficiation process at mines	No Proposal	Nil	Not required in Limestone.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Mechanical sizing and screening done by crusher with screening arrangement.		



## 8.0 Environment:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Top Soil proposed 192960 CuM	Top Soil Generated 169946 CuM	Top Soil removal is less due to less production. EC capacity is only for 5.5 Million Tons so that first bench is not advanced as proposed.
8b	Concurrent use or storage of topsoil	Utilize & Storage	Generated Topsoil is used concurrently for plantation	Utilized for plantation purpose
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Separate dump proposed for OB & Screen/Mineral Reject	OB & screen/mineral reject dumping is carried out as per the proposal at the earmarked location.	5911.4 tons of screen/mineral reject generated
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Nil	No area is mined out.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	Nil	Not required at present.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	2156 Nos samplings proposed within lease	14290 Nos. saplings planted within lease and	13885 nos saplings planted outside the lease area
8g	Survival rate	70%	90%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling carried out	Two water tanker used for water sprinkling on haul roads.
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Top soil of 169946 CuM was generated during the year 2022-23 which is stored in designated place and utilised for plantation purpose.		

## 9.0 Compliance of Rule 45:

S N	Item	Comments		Remarks
9a	Status of submission of monthly and Annual returns	M.R. Submitted up to- Aug-2023		
		A.R. submitted up to- 2022-23 on 28.06.2023		
S N	Item			
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer – Shri Jayprakash Dwivedi Date of appointment-	Mining Engineer and Geologist appointed . Both were present during the inspection.	Nil

		25.05.2017 Geologist – Shri Pankaj Sharma, Date of appointment – 10.04.2023		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Current working – 97.02 Ha Reclaimed/rehabilitated – 0.00 Ha Waste Dump – 7.7 Ha Top soil storage – 4.28 Ha Infrastructure, crushing & Roads – 15.48 Ha Others (water harvesting, plantation) – 22.77 Ha Work done under PMCP – 10.63 Ha	Appears to be correct	Nil
9d	Scrutiny of Annual return on afforestation	14290 nos. of sapling within ML area with 90 % survival rate and 14356 nos. of saplings outside lease area with 90 % survival rate	Appears to be correct.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	5911.4 tons of Screen/Mineral reject generated (grade 25 to 30% CaO)	Appears to be correct.	Nil
9f	Scrutiny of Annual return on ROM stock and/or grade ore	ROM Production- 4589964 tons, opening & closing stock- nil	Appears to be correct.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Cost of Production- Rs 298.44 Ex mine price- Rs. 298.44	This is a captive mine. Thus cost of production is same as Ex mine price.	Appears to be correct.
9i	Scrutiny of Annual return on Fixed assets	Rs. 2899799605 Including Land, Building & Plant and Machinery	As reported in AR 2022-23..	Appears to be correct.
9k	Scrutiny of Annual return on mining Machineries	Shovel PC1250 -3 nos with 6.5CUM Shovel – 2 nos. 1.7CUM  Dumper – 6 nos. 55 tons Dumper – 2 nos. 60 tons Dozer – 320HP Crusher – 1200TPH	Found in operation during the visit.	Found in operation during the visit.

**10- (a) Compliance position of earlier violation pointed out: -**

During the previous inspection on dated : 23.09.2022 by Shri Arun Kumar, RCOM, violation of Rule 11(1) and 13(2) of MCDR, 2017 were found violated. The violations have been complied.

During the current inspection, no serious violation is observed.

Date

(Debadurllav Dash)  
Regional Mining Geologist

