

**MCDR Data Base**

1) Name of Inspecting officer:	Shri Prem Prakash
2) Designation	Regional Controller of Mines, IBM Raipur
3) Accompanying mine official with designation	1. Shri Ritesh Kaimal, HOD-Mines & Mines Manager 2. Shri Ajay Pratap Singh, Sr. Manager-Geology
4) Date of Inspection	12/12/2022
5) Date of Previous Inspection	12/10/2021

**I. GENERAL INFORMATION**

Sl. No.	Particulars	Details
1	Name of the Mine	Arasmeta Limestone Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest: NIL Non-Forest: 499.987 Ha. Total Lease Area: 499.987 Ha.
3	Mine code	38MPR06003
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/378/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Nuvoco Vistas Corporation Limited Equinox Business Park, Tower 3, East Wing, 4thFloor, LBS Road, Kurla (West), Mumbai – 400 070 Phone: +91 (0) 22-67692500 Fax:+91 (0) 22 – 66306510 Email: jayakumar.krishnaswamy@nuvoco.com
6	Village	Arasmeta
7	Taluka/Mandal	Tehsil Akaltara,
8	District	Janjgir Champa
9	Pincode	495663
10	State	Chhattisgarh
11	Post office	Gopalnagar
12	Nearest police station	Mulmula
13	Nearest Railway station	Akaltara
14	Date of Grant of Mining Lease	25/05/1979
15	Date of Execution	First execution of Mining Lease on 31/05/1979 and execution of amalgamated mining lease on 15/01/2001
16	Date of opening of Mine	18/07/1979
17	Date of first Renewal, if applicable and its period & expiry	31/05/1999 to 30/05/2019 (20 years) dated 15/01/2001
18	Date of second Renewal, if applicable and its period & expiry	31/05/2019 to 31/03/2030 (11 Years) As per section 8A of MMDR Amendment Act, 2015, Mining Lease Period has been extended for 50 years. (For Captive Lease) i.e. extended up to 31/03/2030 <i>Supplementary lease agreement for extended period has been made on 13/04/2017.</i>
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not applicable.
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Jaya Kumar Krishnaswamy, Nominated Owner, M/s Nuvoco Vistas Corporation Limited Equinox Business Park, Tower 3, East Wing, 4th Floor, LBS Road, Kurla (West),

		Mumbai – 400 070 Phone: +91 (0) 22- 66306510 Fax:+91 (0) 22 – 67692595 Email:jayakumar.krishnaswamy@nuvoco.com Date of Appointment: 01/11/2018
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri. Manoj Kumar Agrawal, Mine Agent, M/s Nuvoco Vistas Corporation Limited, P.O-Gopalnagar, Tehsil- Akaltra, District- Janjgir Champa, Chhattisgarh - 495663 Phone: +91 (0) 7817-233234, Fax: +91 (0) 7817-234237,234286 Email: manoj.agrawal@nuvoco.com Date of Appointment: 01/03/2022
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Ritesh Kaimal, Mines Manager, M/s Nuvoco Vistas Corporation Limited, P.O-Gopalnagar, Tehsil- Akaltra, District- Janjgir Champa, Chhattisgarh - 495663 Experience: +18 Years, Phone: Mobile: +91 (0) 9893019619 Email: ritesh.kaimal@nuvoco.com Date of Appointment: 16/05/2016
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Moradhawaj Giriya, Mining Engineer, Qualification: BE in Mining Engineering, Experience: +19 Years M/s Nuvoco Vistas Corporation Limited, P.O-Gopalnagar, Tehsil- Akaltra, District- Janjgir Champa, Chhattisgarh - 495663 Phone: 9893124516 Email: moradhawaj.giriya@nuvoco.com Date of Appointment: 01/06/2020
24	Name of the Geologist , Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Ajay Pratap Singh, Geologist, Qualification: M.Sc. & PhD in Geology, Experience: +17Years, M/s Nuvoco Vistas Corporation Limited P.O-Gopalnagar, Tehsil- Akaltra, District- Janjgir Champa, Chhattisgarh - 495663 Phone: 7898900524 Email:ajay01.singh@nuvoco.com Date of Appointment: 02/01/2012
25	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	<b>Review Mining Plan and Progressive Mine Closure Plan</b> , approved vide letter no. जांजगीर/चुप/खयो-1261/2020 Raipur dated 12/02/2021 Proposal Period: 2021-22 to 2025-26
27	Mineral(s) granted in lease	Limestone
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanized, Others or Manual)	Category 'A' Fully Mechanised
30	Captive/Non Captive	Captive

## II. SCIENTIFIC MINING

*[Data in respect of financial year (2021-22) or cumulative, as applicable]*

Sl. No	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
<b>A. EXPLORATION:-</b>				
1a	Backlog of Previous Year	No exploration has been proposed in the approved Review of Mining Plan during F.Y. 2021-22	Not applicable	
1b	Exploration Over Lease area for Geological Axis 1 or 2	No proposal	Nil	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	Phase wise exploration was carried out by different agencies in the past
1d	Balance area to be explored to bring Geological axis 1 or 2	12 no. of boreholes were proposed in the FY 2022-23 as per approved Review of Mining Plan to cover the entire area in G1.	Boreholes drilling carried out in 2022-23	
1e	Balance reserves as on 01/04/2022	Under (111): 23.092 Million Tonnes Under (211): 11.20 Million Tonnes Under (331): 1.18 Million Tonnes Under (333): 9.98 Million Tonnes		As per RMP approved and AR submitted for the year 2021-22
1f	General remarks of inspecting officer on geology, exploration etc.	No exploration has been proposed in the approved Review of Mining Plan during F.Y. 2021-22. 12 no. of bore holes were proposed in the FY 2022-23 to cover the entire area in G1.		

### B. Development

SN	Item	Proposals (2021-22)	Actual Work (2021-22)	Proposals (2021-22)
2a	w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	Development proposed in three (03) pits namely Pit No. 1, Pit 1 Ext. and Pit No. 2 as shown in production and development plan	carried out within the proposed area	
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	Separate benches proposed in OB & mineral.	Separate benches were maintained in OB & mineral.	Soil/OB: 01 no. Ore/Mineral: 04 nos.
2c	Stripping ratio or ore to OB Ratio (tones)	1:0.218	1:0.272	OB included in topsoil

2d	Quantity of topsoil generation in m3	243000 CuM	136323.248 CuM	
2e	Quantity of overburden/ interburden generation in m3	206881 CuM	246912.7 CuM	Interburden
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Production & development was not carried out within the proposed grids as per the approved plans. However, development of pit no.1&2 observed lagging far behind than proposal. Violation of Rule 11(1) pointed out in this regards.		

Sl. No	Item	Proposals	Actual Work	Remarks
<b>C. EXPLOITATION:-</b>				
3a	Number of Pit Proposed for Production	03 no.	03 nos.	
3b	Quantity of ROM mineral production proposed	2060077 Metric Tonnes	1405979.540 Metric tonnes	
3c	Recovery of Sailable/ Usable Mineral from ROM Production	100%	100%	
3d	Quantity of mineral reject generation	No Proposal	Nil	No generation of mineral rejects
3e	Grade of mineral reject generation and threshold value declared	N/A	Not applicable	
3f	Quantity of sub-grade mineral generation	No Proposal	Nil	
3g	Grade of sub-grade mineral generation	No Proposal	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Blasted material from the mines is fed to the crusher.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal	No such study carried	
3j	Provision of drilling & blasting in mineral benches	Deep hole drilling and Blasting proposed in mineral benches.	Deep hole drilling and blasting is 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 MP/SOM	Height Topsoil/OB: 2.0 m to 3.5 m Ore/Mineral: 6 to 8.0 m Width: around 25-50 Meter (minimum 11 meter)	Bench height and width have not maintained as per proposal in pit-1 extension.	Violation of Rule 11(1) pointed out in this regard.
3m	Total area covered under excavation/pits	198.498 Ha. up to end of RMP period including	188.986 Ha. Up to end of F.Y. 2021-22	

		back filling area.	including backfilling area	
3n	Ore to OB ratio for the pit/mine during the year	1:0.218	1:0.272	Tonne:CUM
3o	Total area put in use under different heads at the end of year	Total area 238.828 ha up to 2025-26	Total area 232.116 ha up to 2021-22	As reported in AR 2021-22
3p	Production of ROM mineral during last five-year period, as applicable	Yr-2016-17: 2043985.00	Yr-2016-17: 1813006.00	Violation issued for lower production. Actual production was within the proposed quantity.  All units in MT
		Yr-2017-18: 2011985.00	Yr-2017-18: 2011532.00	
		Yr-2018-19 2047019.00	Yr-2018-19 1691857.00	
		Yr-2019-20: 2021128	Yr-2019-20: 1775537	
		Yr-2020-21: 2025664	Yr-2020-21: 1326334.41	
		Yr-2021-22 : 2060077	Yr-2021-22 : 1405979.54	
3q	General remarks of inspecting officer on method of mining etc.	Open cast working being carried out by deployment of HEMM with the help of deep hole drilling & blasting.		

#### D. SOLID WASTE MANAGEMENT - DUMPING:-

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	Separate dumping of Topsoil & OB proposed	Separate stack of topsoil was not maintained as proposed. Generated topsoil was found backfilled, mixing with waste in the mined-out area of pit no. 01.	Violation of Rule 11(1) pointed out.
4b	Location of topsoil, OB & mineral reject dumps	In between UTM Co-ordinate Soil dump Pit -1 E638045 to E638227.32 N2429042.67 to N2429207.62 Soil Dump Pit-1 E638260.44 to E638380.12 N2429108.23 to N2429404.58 Dump pit-2 E639400.62 to E639477.39 N2429325.16 to 2429404.48 e Dump pit-1 E638721.27 to E638306.09 N2429090.33 to N2428958.50	Waste dumping being carried out as proposed. Top soil stacks are not maintained as proposed.	-do-

4c	Number of dumps within lease area and outside lease area	<u>Within Lease Area:</u> Topsoil/OB/Waste: 03 no. Mineral Sub-grade: Nil	<u>Within Lease Area:</u> Topsoil/OB/Waste: 03 no. Mineral Sub-grade: nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	Proposed beyond Ultimate pit limit.	Being done as per Proposal.	
4e	Number of active & alive dumps	One dump in pit no 2 and backfilling area in pit no 1	As per proposal	
4f	Number of dead dumps	02	Old dump being re-handled for advancement of benches	
4g	Number of dumps stabilized.	-	Old dump has been stabilized	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dump	<b>Proposed</b> Retaining wall 50L*3W*2.5H Garland drain 575L*3W*2.5H	<b>Actual</b> Retaining wall 125L*2W*2.5H Garland drain 657L*2W*2.5H	
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management	Separate stack of topsoil is not being maintained as proposed. Violation of Rule 11(1) pointed out. Protection measures for waste dump in form of garland drain and retaining wall have been provided.		

Sl. No	Item	Proposals	Actual Work	Remarks
<b>C. SOLID WASTE MANAGEMENT - BACKFILLING:-</b>				
5a	Status of part or full extraction of mineral from mined out area before starting backfilling	Proposal for full extraction of mineral from mined out area before starting backfilling has been given in the	Being done as per proposal given in the approved document	
5b	Area under backfilling of mined out area	Void available for backfilling 41.525 up to end of plan period	22.05 Hectare up to 2021-22	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent use of topsoil for spreading over the non-mineralized zone for plantation of saplings, levelling and bund formation in 7.5 mt.	Topsoil observed mixed with waste in the back filled area.	Violation of Rule 11(1) pointed out.

		barrier		
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Backfilling/reclamation being carried out as proposed.		

### C. Progressive Mines Closer Plan

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23.	To be submitted before 01st July every year	PMCP report received in time.	Annual Report submitted on 29.06.2022
6b	Management of worked/mined outbenches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	0.7 Ha 1.5 Ha. 5000 nos. ----- By Plantation -	0.7 Ha 1.5 Ha. 5327 nos 455988 nos  By Plantation  Rs. 423738	
6c	Compliance on reclamation and rehabilitation by backfilling Voids available for backfilling(L X B X D)  Void filled by waste/tailings  Afforestation on the backfilled area	0.7 Ha.  Waste, including topsoil 449881 cum  1.5 ha	0.7 Ha  Waste, including topsoil 383235.91 cum  1.5 ha	
	iv) Rehabilitation by making water reservoir v) Any other specific means	Not Proposed.	Not applicable	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	5000 nos. 1.5 Ha. By plantation.	5327 nos. 1.5 Ha. By plantation.	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed	Being carried out	All environment parameters are within permissible limits

6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The lessee has carried out the PMCP activities as per the proposal. Monitoring of environmental parameters was done regularly.
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Sl. No	Item	Proposals	Actual Work	Remarks
<b>D. MINERAL CONSERVATION:-</b>				
7a	ROM mineral dispatch or grade wise sorting within lease area	Direct ROM dispatch to their captive plant	Blasted material is sent to the crusher for further sizing & dispatched to their captive cement plant	
7b	Method of Grade-wise mineral sorting i.e. manual or mechanical	Blending by mechanized method	Bench wise blending as per the requirement of cement plant	
7c	Different grade of mineral sorted out at mines	N/A	N/A	
7d	Any beneficiation process at mines	No proposal	No beneficiation is done in mines except crushing	Only crushing is done, after which mineral is conveyed to plant through covered belt conveyors
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 cement plant.		

Sl. No	Item	Proposals	Actual Work	Remarks
<b>E. ENVIRONMENT:-</b>				
8a	Separate removal and utilization of topsoil	Concurrent use of topsoil for spreading over the non-mineralized zone for plantation of saplings, levelling and bund formation in 7.5 mt. barrier	Separate stack of topsoil was not maintained as proposed. Generated topsoil was found backfilled, mixing with waste in the mined-out area of pit no. 01.	Violation of Rule 11(1) pointed out.
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 rock, rejects is proposed	Separate dumps are maintained	Violation issued for unsystematic use of topsoil against the proposal under Rule 11(1) of MCDR, 2017
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling area proposed	Done as proposed	
8e	Phased restoration, reclamation and rehabilitation of lands	Proposal for reclamation in 0.7 ha. area yearly has been	Done as proposed	



	affected by mining operations (Pits, dumps etc)	given in the approved document in the mined out area.		
8f	Baseline information on existence of plantation & additional plantation done	Plantation Proposed : WML: 500 saplings in 2021-22	Within lease area-5327 nos. saplings	As per the AR 2021-22
8g	Survival rate	Not specified	Approx. 81%	
8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling on roads through water tanker.	Continuous water sprinkling done on haul roads to suppress the dust generated Water sprinkling by 25 KL and 9KL water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in & around the mine area was good as the lessee had carried out afforestation & environmental protection measures as per the proposal.		

#### F. Compliance of Rule 45

S. N.	Item	COMMENTS		Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – November 2022 A.R. submitted upto- F.Y. 2021-22		
S. N.	Item	Details GIVEN in A.R.	Observation of I/Officer	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	<b>Mining Engineer:</b> Shri Moradhwaj Giriya <b>Geologist:</b> Ajay Pratap Singh <b>Manager:</b> Ritesh Kaimal	Employed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Total area 232.116 ha up to 2021-22	Appears to be correct	
9d	Scrutiny of Annual return on Afforestation	Within lease area: 5327 @ 81% survival rate	Appears to be correct	
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 graded ore	ROM: Opening stock- Nil, Production- 1405979.00 tonnes, Closing stock- Nil	Appears to be correct	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex mine price & cost of production- Rs 323.92/Ton Sale Value: Nil	Limestone from the mine is used for captive consumption in cement plant	
9i	Scrutiny of Annual return on fixed assets	Rs 249360293/- including land,	Appears to be correct.	

		machinery & building		
9k	Scrutiny of Annual Return on mining machineries	Back hoe (4 cum & 9 cum) - 02, Shovel-4 com-03, dumper (31.75 tonne) – 08, Water tanker-20000ltr-01, Rock frill-115 mm-20 nos., Dozer (400 hp)-02, Motor grader- (173 hp)-01	Observed deployed	

**III. Status of compliance of MCDR, 2017 including therewith the rectification of outstanding violation of the rules.**

Date of last inspection	Violation pointed out	Compliance reported
12/10/2021	Rule 11(1) and 31(4) of MCDR,2017	Yes, all complied.

Violation of Rule 11(1) of MCDR 2017 is pointed out during current inspection.

Date:

प्रेम प्रकाश / Prem Prakash  
 क्षेत्रीय खान ननयंत्रक / Regional Controller of Mines  
 भारतीय खान ब्यूरो / Indian Bureau of Mines