

MCDR INSPECTION REPORT 2022-23

General:

Sl .No.	Particulars	Details
1	Name of the Mine	Arasmeta Limestone Mine
2	Date of Inspection:	27/12/2023
3	Name of Inspecting Officer	Mr. D. Upadhyay, DCOM
4	Name of official accompanying inspection	Narayan Nahak Sr. Manager Mines & Ajay Pratap Singh, Sr. Manager-Geology (Geologist)
5	Last date of Inspection & Officer	12/12/2022, Shri Prem Prakash, RCOM
6	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.
7	Mine code	38MPR06003
8	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/378/2011
9	Name of the Lease, 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 – 400070 Phone: +91 (0) 22- 67692500 Fax:+91 (0) 22 – 66306510 Email:- jayakumar.krishnaswamy@nuvoco.com
10	Village	Arasmeta
11	Taluka/Mandal	Tehsil - Akaltara
12	District	Janjgir Champa
13	Pin code	495663
14	State	Chhattisgarh
15	Post Office	Gopalnagar
16	Nearest Police Station	Mulmula
17	Nearest Railway Station	Akaltara
18	Date of Grant of Mining Lease	1-Mining lease for limestone over an area of 510.588 hectare was granted on 25/05/1979. 2-The another mining lease, over an area of 11.299 hectare was also granted on 16/05/1986 3-Both the mining leases were amalgamated and subsequently renewed under one mining lease of 521.887 hect. vide state Govt. order No. F-3/110/98/12/2, dated 26.4.2000
19	Date of Execution	First Execution of Mining Lease on

		31/05/1979 and execution of amalgamated mining lease on 15/01/2001
20	Weekly day of rest	Tuesday
21	Date of opening of Mine	18/07/1979
22	Date of First Renewal, if applicable and its period & expiry	31/05/1999 to 30/05/2019 (20years) dated 15/01/2001 Initially Mining Lease has been granted to M/s Raymond Limited, Ratnagiri Maharashtra. & amalgamation of lease deed execution on 15/01/2001 for twenty years.
23	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 Supplementary lease agreement for extended period has been made on 13/04/2017
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not applicable.
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Jayakumar Krishnaswamy, Managing Director 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
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Garikapati Hari Kishore, Agent & Unit Head Arasmeta Cement Plant of M/s Nuvoco vistas corporation , P.O-Gopalnagar, Tehsil- Akaltra, District- Janjgir Champa, Chhattisgarh, Phone no- 07817-233234, Fax No -07817-234237,234286 Email:- harikishore.garikapati@nuvoco.com, Date of appointment- 15/09/2023
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri Ritesh Kaimal, DGM (Mines) Arasmeta Cement Plant M/s Nuvoco Vistas Corporation Limited P.O-Gopalnagar, Tehsil- Akaltra, District- Janjgir Champa, Chhattisgarh - 495663 Experience: +20 Years, Phone: Mobile: +91 (0) 9893019619 Email: ritesh.kaimal@nuvoco.com

		Date of Appointment: 16/05/2016
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Moradhawaj Giriya, Mining Engineer, Qualification: B.E. in mining Experience: +19 Years Arasmeta Cement Plant 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
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Ajay Pratap Singh, Sr. Manager-Geology Qualification: M.Sc. & P.hD in Geology, Experience: +19 Years, Arasmeta Cement Plant 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
30	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	Review Mining plan and progressive mine closure plan, approved vide letter no. जांजगीर/चुना/खमो-1261/2020 Raipur dated 12/02/2021
31	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	Proposal Period: 2021-22 to 2025-26 Note- For specific condition approval letter attached. Scheme of Mining approved vide letter no. 314(3)/2007/MS/PMCP-28 Nagpur dated 18/03/2008 Proposal Period: 2006-07 to 2010-11 Scheme of Mining approved vide letter no. 314(3)/2012/MS-23 Nagpur dated 06/03/2013 Proposal Period: 2011-12 to 2015-16
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)	Category 'A' Fully Mechanised
35	Captive/Non-Captive	Capative
36	Present EC Status	2700000 ton/ year, EC No J-11015/64/2003-IA.II (M) dated 18/07/2005.
37	Status of Financial Assurance	Valid upto 31/03/2026 ,Rs:- 71648400

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

1.0 Exploration:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
1a	Backlog of previous year Proposals	12 no. (Meterage-650m) of Bore Hole proposed for The FY 2022-23 as per Approved document during RMP period.	29 no. of boreholes drilled. (876 meter) in FY 2022-23	No Backlog
1b	Exploration over lease area for Geological axis 1 or 2.	G1 level	G1 level	Entire lease area is explored under G1 level of exploration.
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not specified	Exploration Agency- Gem Consultant, Expenditure Rs. 2112424/-	Exploration Agency- Gem Consultant, Expenditure Rs. 2112424/-
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Not specified	Entire lease area is explored under G1 level of exploration.	Entire lease area is explored under G1 level of exploration.
1e	Balance reserves as on 01.04.2023	Balance reserves as on 01.04.2023 is 21.890 Million Tonnes		
1f	General remarks of Inspecting officer on geology, exploration etc.	Entire lease area is explored under G1 level of 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 No. 1 E637741.54 to E639161.96 N2428750.16 to N2429534.71 Pit 1 Ext. E636829.96 to E637921.43 N2428142.37 to N2429139.25 Pit No. 2 E639106.48 to E640000 N2428252 to N2429258.78	Pit No. 1 E637741.54 to E639161.96 N2428750.16 to N2429534.71 Pit 1 Ext. E636829.96 to E637921.43 N2428142.37 to N2429139.25 Pit No. 2 E639106.48 to E640000 N2428252 to N2429257.33	The development carried out within the proposed extent as per the proposal
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Separate benches proposed.	Separate benches in Ore & OB are maintained.	Soil/OB: 01 no. Ore/Mineral: 04 nos

2c	Stripping ratio or ore to OB ratio	1:0.218T/cu.m	1:0.143 T/cu.m	Due to less production, OB generated less.
2d	Quantity of topsoil generation in m ³	242778 CuM	99633 CuM	Due to less production, top soil generated less.
2e	Quantity of overburden generation in m ³	206994 CuM	72965.00 CuM	Due to less production, OB generated less.
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development is carried out within approved proposal.		

3.0 Exploitation:

S. N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
3a	Number of pits proposed for production	03 no.	03 nos.	03 nos. pits.
3b	Quantity of ROM mineral production proposed	2059795 Metric Tonnes	1201762.75 Metric tonnes	Production is carried out as per requirement of its captive plant.
3c	Recovery of Salable/usable mineral from ROM production	100%	100%	Recovery 100%
3d	Quantity of mineral reject generation	No Proposal	Nil	Nil
3e	Grade of mineral reject generation and threshold value declared	No Proposal	Nil	Nil
3f	Quantity of sub-grade mineral generation	No Proposal	Nil	Nil
3g	Grade of sub-grade mineral generation	No Proposal	Nil	Nil
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal	Nil	Nil
3j	Provision of drilling & blasting in mineral benches	Drilling and blasting proposed.	Drilling and blasting is carried out as per proposal.	Dia: 102-115 mm Spacing: 4.0 m to 5.0 m Burden: 2.0 m to 3.0 m Depth: 6.0 m to 9.0 m
3k	Provision of mining machineries in mineral benches	Shovel and dumper combination	Shovel and dumper combination	Drill Machine 115mm dia, Hydraulic Excavator with 4.0CuM, Dumpers with 35 Metric Tonnes capacity etc.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	Bench height is suitably matched with the excavator.
3m	Total area covered under excavation /pits	204.698 Ha. up to end of RMP Period including backfilling area.	190.504 Ha.Up to end of F.Y. 2022-23 including backfilling area	190.504 Ha.Up to end of F.Y. 2022-23 including backfilling area
3n	Ore to OB ratio for the pit/mine during the year	1:0.218	1:0.143	Due to less production, OB generated less.
3o	Total area put in use under different heads at the end of year	204.698 Ha.	190.504 Ha.	
3p	Production of ROM mineral during last five-years period, as Applicable (tonne)	Yr-2018-19 2047019.00 Yr-2019-20 2021128.00 Yr-2020-21 2025664.00 Yr-2021-22 2060077.00 Yr-2022-23 2059795.00	Yr-2018-19 1691857.00 Yr-2019-20 1775537.00 Yr-2020-21 1326334.41 Yr-2021-22 1405979.54 Yr-2022-23 1201762.75	Production is carried out as per requirement of its captive plant.
3q	General remarks of inspecting officer on method of mining etc	The ROM production has been carried out from 03 pits as per proposal.		

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)	Proposal for separate dumping of Topsoil and backfilling of OB, have been given in the approved Document.	Being done as per proposal.	Being done as per proposal.
4b	Location of topsoil, OB & mineral reject dumps	Soil Dump pit-1 E638045 to E638227.32 N2429042.67 to E2429207.16 Soil Dump Pit-1 E638301.85 to E638432.61 N2429048.86 to N2429122.54 Backfilled Area Pit -2 E639522.48 to E639473.40 N2429412.91 to N2429307.44 Waste Dump pit-1	Soil Dump pit-1 E638045 to E638227.32 N2429042.67 to E2429207.16 Soil Dump Pit-1 E638301.85 to E638432.61 N2429048.86 to N2429122.54 Backfilled Area Pit -2 E639522.48 to E639473.40 N2429412.91 to N2429307.44 Waste Dump pit-1	Being done as per proposal.

		E638306.093 to E638721.77 N2428950 to N2429090.33	E638306.093 to E638721.77 N2428950 to N2429090.33	
4c	Number of Dumps within lease area and outside lease area	<u>Within Lease Area:</u> Topsoil/OB/Waste: 04 no. Mineral Sub-grade: nil	<u>Within Lease Area:</u> Topsoil/OB/Waste: 04 no. Mineral Sub-grade: nil	Being done as per Proposal
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Proposed beyond Ultimate pit limit.	Being done as per Proposal.	Being done as per Proposal
4e	Number of Active & Alive dumps	Backfilling is proposed.	Backfilling is continue.	Backfilling is continue.
4f	Number of dead dumps	Not proposed.	Nil.	02 dead dumps exist.
4g	Number of dumps established	Proposal has been given in the approved document for 01 no of dump..	Proposed area has been reclaimed and plantation over waste dump has been done for dump stabilization.	
4h	Whether Retaining wall or garland drain all along dumps are there	Retaining wall and garland drain Proposed	Retaining wall & Garland drain constructed	Retaining wall & Garland drain constructed
4i	Length of Retaining wall or garland drain all along dump	Proposed Retaining wall 70L*3W*2.5H Garland drain 435L*3W*2.5H	Actual Retaining wall 75L*3W*2.5H Garland drain 438L*3W*2.5H	Retaining wall & Garland drain constructed
4j	Number of settling ponds	Not proposed.	NIL	Nil
4k	Specific comments of inspecting officer on waste dump management	Separate dumping of topsoil, is maintained. Retaining wall and garland drain are constructed around the dump.		

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	Proposal for full extraction of mineral from mined out area before starting backfilling has been given in the approved document.	Being done as per proposal given in the approved document	Being done as per proposal given in the approved document
5b	Area under backfilling of mined out area	0.7 Hectare	0.466 Hectare	Concurrent Backfilling is continue.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Stacking and utilization.	Partially Stacking and partially utilized in plantation.	Partially Stacking and partially utilized in plantation.
5d	Total area fully reclaimed & rehabilitated	0.7 ha only backfilling	0.466Hectare	Concurrent Backfilling is continue.
5e	General remarks of inspecting officer on backfilling,	Concurrent Backfilling of mined out area is being practiced.		

	reclamation etc	
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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)	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of every Year	Submitted for the reporting year	Submitted for the reporting year
6b	Management of worked/mined out benches			
	Area available for rehabilitation (Ha)	1.50 Ha	1.76 Ha	Being done as per Proposal
	Afforestation done (ha)	1.50 Ha	1.76 Ha	Being done as per Proposal
	No. of saplings planted during the year	5000	5695 nos of saplings	Being done as per Proposal
	Cumulative no. of plants	Not specified.	653078 nos	Being done as per Proposal
	Any other specific method of rehabilitation	By Plantation	By Plantation	Being done as per Proposal
	Cost incurred on watch & care during the year	3.0 lakh	7.0 lakh	Being done as per Proposal
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	0.7 Hectare backfilling	0.466 Hectare	Concurrent Backfilling is continue.
6d	Compliance of Rehabilitation of waste land within lease i. Afforestation ii. Area rehabilitation (ha) iii. Method of rehabilitation	Not proposed..	Nil.	Nil.
6e	Compliance of Environment monitoring (core zone & buffer zone)	Environmental monitoring proposed	Environmental monitoring carried out at regular interval and observed that all the parameters within the specified standard limit.	Environmental monitoring carried out at regular interval and observed that all the parameters within the specified standard limit.
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Concurrent Backfilling is continue. Air quality, Surface Water, Ground water & Noise level monitoring are being carried out.		

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	ROM mineral dispatched	ROM mineral dispatched	ROM mineral dispatched
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	Mechanical
7c	Different grade of mineral sort out at mine	ROM mineral dispatched	ROM mineral dispatched	ROM mineral dispatched
7d	Any beneficiation process at mines	Nil	Nil	No such proposal for mineral beneficiation was proposed during the reporting year.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	ROM mineral dispatched for its captive plant.		

8.0 Environment:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Yes given	Being done as	Being done as per proposal.
8b	Concurrent use or storage of topsoil	Concurrent use of topsoil.	Being done as per proposal.	Being done as per proposal.
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Separate dumping of Topsoil, OB backfilling, have been proposed.	Being done as per proposal.	Being done as per proposal.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Backfilling area proposed	Concurrent Backfilling is continue.	Concurrent Backfilling is continue.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	0.7 ha. area backfilling	Being done as per proposal.	Being done as per proposal.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Not specified.	2022-23 : 5695 Nos. saplings have been be planted over the reclaimed area. Cumulative Sapling-653078 nos	2022-23 : 5695 Nos. saplings have been be planted over the reclaimed area. Cumulative Sapling-653078 nos
8g	Survival rate	Not specified.	Survival rate 80%	Survival rate 80%
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads through water tanker.	Water sprinkling by 25 KL and 9KL water	Water sprinkling by 25 KL and 9KL water tanker

			tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Aesthetic beauty in and around mines area is maintained by plantation.		

9.0 Compliance of Rule 45:

S N	Item	Comments		Remarks
9a	Status of submission of monthly and Annual returns	MR submitted upto November 2023		
		AR submitted upto F.Y 2022-23		
S N	Item	Details Given in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Moradhvaj Giriya Geologist: AjayPratap Singh Manger: Ritesh Kaimal	Mining Engineer and Geologist appointed	Mining Engineer and Geologist appointed
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 190.504 Ha Reclaimed area- 22.516 Ha. OB/waste dump- 27.613Ha.	Found in order.	Found in order
9d	Scrutiny of Annual return on afforestation	Within lease area: 5000 nos.	Found in order	Found in order
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	Mineral reject not generated.	Mineral reject not generated.
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Closing Stock: ROM: NIL Graded Ore: NIL	Found in order.	Found in order
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Ex- Mine Price: 342.27 Per Metric Tonne Cost of Production: 342.27 Per Metric Tonne	Found in order.	Found in order
9i	Scrutiny of Annual return on Fixed assets	Rs. 198442828	Found in order.	Found in order
9k	Scrutiny of Annual return on mining Machineries	Machineries Shovel, dumpers etc furnished in AR.	Found in order.	Found in order

10- Details of violations observed during last inspection and the compliance status.

No Violation of serious nature is observed during the inspection.

Date:

Signature:
Name: D. Upadhyay
Designation: DCOM