

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	File No.	CHG/Janjgir-Champa/Lst-04/Raipur
2	Name of inspecting office & designation	Shri Debadurllav Dash , Regional Mining Geologist
3	Accompanying Mine Official with Designation	Mr Ritesh Kaimal HOD Mines and Mr Subhransu Sekhar Panda (Mines Manager)
4	Date of inspection	09.03.2023
5	Date of Last Inspection & Officer	22.07.2021, Shri Rajesh Kumar Das, Sr. ACOM
6	Name of the Mine	Kirari Limestone Mines
7	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease area 167.048 hectare. (Agriculture land- 100.356 ha, Govt. Land- 66.690 ha. Forest land – Nil)
8	Mine Code	38CHG06001
9	IBM Registration Number under rule 45 of MCDR, 1988	IBM/378/2011
10	Name of the lessee, Address, phone, email and fax number	Nuvoco Vistas Corp Ltd, Equinox Business Park, Tower -3, East Wing, 4th Floor , Off Bandra –Kurla Complex, LBS Road, Kurla –West Mumbai-400070
11	Village	Kirari and Chorbhatti
12	Taluka / Mandal / District	Taluka- Akaltra, District-Janjgir Champa
13	State	Chhattisgarh
14	Post office & PIN	Dev Kirari 495663
15	Nearest police station	Akaltra
16	Nearest Railway station	Akaltra
17	Date of Grant of Mining Lease	19/04/2000
18	Date of Execution	26/08/2000
19	Date of opening of Mine	13/10/2006
20	Date of first Renewal, if applicable and its period & expiry	On dated 13/04/2017 from 26/08/2020 to 25/08/2050 Initially Mining Lease has been granted to M/s Raymond Limited, Ratnagiri Maharashtra. Later on Mining lease has been transferred to M/s Lafarge India Limited, Mumbai dated 17/01/2001. Thereafter addendum to mining lease agreement from M/s Lafarge India Limited to M/s Nuvoco Vistas Corporation Limited dated 30/11/2017 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 25/08/2050 Supplementary lease agreement for extended period has been made on 13/04/2017
21	Date of second Renewal, if applicable and its period & expiry	NA
22	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA

23	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Nominated owner: Mr. Jayakumar Krishnaswamy M/s Nuvoco vistas Corporation limited Equinox Business Park Tower 3, East Wing 4th Floor, off Bandra -Kurla Complex, LBX road , Kurla West Mumbai-400070, India . phone no 022-66306511,email-jayakumar.krishnaswamy@nuvoco.com , Date of appointment-01/11/2018
24	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Manoj Kumar Agrawal, Agent & Plant 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 Mail ID- manoj.agrawal@nuvoco.com , Date of appointment- 01/03/2022
25	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Subhransu Sekhar Panda Arasmeta Cement Plant of M/s Nuvoco vistas corporation limited, P.O-Gopalnagar, Tehsil-Akaltra, District- Janjgir Champa, Chhattisgarh, Phone no- 9752487600 Mail ID-subhransu.panda@nuvoco.com - Date of appointment-01/03/2021
26	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Subhransu Sekhar Panda , Arasmeta Cement Plant of M/s Nuvoco vistas corporation limited, P.O-Gopalnagar, Tehsil- Akaltra, District- Janjgir Champa, Chhattisgarh, Phone no- 9752487600 Mail ID- subhransu.panda@nuvoco.com, Date of appointment-01/11/2021
27	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Mr. Syed Abdul Mannan, Arasmeta Cement Plant of M/s Nuvoco vistas corporation limited, P.O-Gopalnagar, Tehsil-Akaltra, District- Janjgir Champa, Chhattisgarh, Mail ID- syed.mannan@nuvoco.com, Date of appointment-22/07/2021
28	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan was approved vide letter no. 314(3)/99/MCCM©/MP-12 dated 20.11.2000 for the period from 2006-07 to 2010-11
29	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Scheme of Mining was approved vide letter no. 314(3)/2011/MCCM©/MP/51 dated 21.06.2012 for the period from 2011-12 to 2015-16 Modified Scheme of Mining was approved vide letter no. 314(3)/2012/MCCM©/MP/41 dated 21.06.2013 for the period from 2013-14 to 2015-16 Review of Mining Plan approved vide letter no. Janj/Chup/Khayo-474/Nag/2015/21/Raipur dated 19.08.2016 for the period from 2016-17 to 2020-21 Review of Mining Plan was approved vide letter no. Janj/Chup/Khayo-1262/2020 Raipur dated 12/02/2021 for the period from 2021-22 to 2025-26
30	Mineral(s) granted in lease and proved for mining	Limestone
31	Method of Mining(Opencast, Underground)	Opencast
32	Category (Fully Mechanised, Others or Manual)	Mechanised
33	Captive/Non Captive	Captive

34	Existing EC Limit and validity	360000 ton/ year, EC No J-11015/23/2002-IA.II (M) dated 09/12/2003 valid upto 08/12/2033
35	Status of Financial Assurance as per rule 27 of MCDR, 2017	Valid upto 31/03/2026 ,Rs:- 12593400

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

1.0 Exploration

SN	Item	Proposals 2021-22	Actual work 2021-22	Remarks
1a	Backlog of previous year	Nil	Nil	During the year 2022-23, 10 boreholes have been proposed.
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	No exploration proposed during the year 2021-22
1d	Balance area to be explored to bring Geological axis in 1 or 2	Under G1 Category: 167.048Ha	Under G1 Category: 167.048 Ha	The entire lease has been reported as covered under G1 scale of exploration in approved MP.
1e	Balance reserves as on 01.04.2022 (in Million Tonnes)	34.145 Million Tonnes	111: 34.354 Million Tonnes	As per Annual Return.
1f	General remarks of inspecting officer on geology, exploration etc.	The Limestone in the lease area are mostly cement grade limestone. The area has been explored by drilling of boreholes from 1994-95 onwards. In the process, 108 boreholes have been drilled in G1 scale of exploration with meterage of 3289 mtrs. An area of 167.048 ha area is reportedly covered under G1 scale of exploration. During the year 2021-22, there was no proposed exploration. However, during the year 2022-23, 10 boreholes have been proposed.		

2.0 Development

SN	Item	Proposals 2021-22	Actual work 2021-22	Remarks
2a	Location of development w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	E 650277 to E 650718 , N 2430042 to N 2429585	E 650298 to E 650718 ,N 2430043 to N 2429588	Development of quarry is mostly as proposed with minor deviation. Thus no violation is pointed out.
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	One soil and four Limestone benches	One soil and four Limestone benches	As per proposal
2c	Stripping ratio or ore to OB ratio	1:0.22 (in approved document page no 50, Ore in tones 360000 and total	1:0.19 (actual limestone 197980.980 tonnes and waste rock 38799 m3	Slight deviation, thus no violation is pointed out.

		overburden 78220 m3)		
2d	Quantity of topsoil generation in m3	48300	16860.84	
2e	Quantity of overburden generation in m3	78220	38799	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	A single quarry has been developed as per proposal. The development of quarry is within the proposed area. There is a minor deviation in stripping ratio due to less generation of waste.		

3.0 Exploitation

SN	Item	Proposals 2021-22	Actual work 2021-22	Remarks
3a	Number of pits proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	360000	197980.980	The production of rom is on lower side due to less demand from the captive cement plant.
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral reject generation and threshold value declared	Nil	Nil	
3f	Quantity of sub-grade mineral generation	Nil	Nil	
3g	Grade of sub-grade mineral generation	Nil	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised crushing and screening has been proposed in the approved document.	Mechanised crushing and screening has been proposed in the approved document.	Done as proposed.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No beneficiation study has been proposed in the approved document during MMP period	Not done.	No beneficiation is required for Limestone.
3j	Provision of drilling & blasting in mineral benches	Dia.: 110 mm to 115 mm Spacing: 2.8 m to 5.0 m Burden: 3.0 m to 34.8 m Depth: 6.0 m to 8.0 m	Dia.: 110 mm Spacing: 4.5 m to 5.5 m Burden: 2.5 m to 3.3 m Depth: 6.0 m to 8.0 m	As per proposal.

3k	Provision of mining machineries in mineral benches	Yes	Yes	Ass per proposal.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height Topsoil/OB: 3 m to 4 m Ore/Mineral: 6- 7 m Width: 20 to 30 meter	Topsoil/OB: average 3 to 3.5 m Ore/Mineral: average 6 to 6.5 meter Width: Average 20 to 25 meter	As per proposal.
3m	Total area covered under excavation/pits	20.78 Ha. up to end of MMP period	14.825 Ha. up to end of F.Y. 2021-22	Due to less production.
3n	Ore to OB ratio for the pit/mine during the year	1:0.22 (in approved document page no 49, Ore in tones 360000 and total overburden 78220 m3)	1:0.19(actual limestone 197980.980 tonnes and waste rock 38799 m3)	Slightly on lower side than proposed.
3o	Total area put in use under different heads at the end of year	Not specific	Covered under current (O/C) working: 14.825 ha, Used for waste disposal: 8.07 ha, Occupied by plant, buildings, residential, welfare buildings & roads: 0.88 ha, Other Purpose (Soil Dump and Road) 8.117ha	
3p	Production of ROM mineral during last five-year period, as applicable (in Metric Tonnes)	2016-17: 360000 t 2017-18: 360000 t 2018-19: 360000 t 2019-20: 360000 t 2020-21-360000 t 2021-22: 360000 t	2016-17-296903 t 2017-18 -279409 t 2018-19 -225749t 2019-20-279353.27 t 2020-21: 138082t 2021-22: 197980t	Production of ore is on lower side than proposed due to less demand from the captive cement plant.
3q	General remarks of inspecting officer on method of mining etc.	The production of rom is on lower side due to less demand from the captive cement plant. Systematic benches have been developed using machines as per proposal with drilling & blasting provision.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals 2021-22	Actual work 2021-22	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	Proposal for separate dumping of Topsoil, Overburden, Mineral have been given in the approved document.	Top soil and waste generated are stacked separately.	As per proposal.
4b	Location of topsoil, OB & mineral reject dumps	In between UTM co-ordinates	Being done as per Proposal	Within the proposed area.

	(Range in UTM/Local Coordinate/Plot No./Location)	E 650228 to E 650297 , N 2429710 to N 2429642 Waste Dump E 649811 to E 650063 , N 2430090to N 2429876	Topsoil: (i) E 650228 to E 650297 , N 2429710 to N 2429642 Waste (ii)) E 649811 to E 650063 , N 2430090to N 2429876	
4c	Number of dumps within lease area and outside lease area	within lease area :02 dumps, 03 soil dump, outside lease area - Nil	Within lease area: 02 waste dumps, 03 soil dump, , outside lease area - Nil	As per proposal.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	Proposed beyond Ultimate pit limit. Being done as per Proposal.	Beyond UPL.	As per proposal.
4e	Number of active & alive dumps	2 nos	2 nos	As per proposal.
4f	Number of dead dumps	03	03	
4g	Number of dumps stabilised	03	03	
4h	Whether Retaining wall or garland drain all along dumps are there	Proposal has been given in the approved document for construction of garland drain and retaining/boulder wall around waste dump to prevent surface run off.	Garland drain and retaining wall have been constructed around waste dumps near lease boundary	
4i	Length of Retaining wall or garland drain all along dump	retaining/boulder wall 350 meter garland drain 575 meter	Garland drain: Approx 252 Meters Retaining/Boulder Wall: Approx 350 Meters	Violation of Rule 11(1) of MCDR, 2017 is pointed out.
4j	Number of settling ponds	1	1	
4k	Specific comments of inspecting officer	The generated top soil and waste dump are dumped as per locations proposed in approved Mining Plan. However, garland drainage & retaining wall have been constructed less than proposed. Violation of Rule 11(1) of MCDR, 2017 is pointed out.		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals 2021-22	Actual work 2021-22	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal of backfilling	Nil	No area is mined out.
5b	Area under backfilling of mined out area	No proposal of backfilling	Nil	-do-
5c	Concurrent use of topsoil for restoration or rehabilitation of	For barrier along the boundary and	Plantation 2756 nos.	

	mined out area (Rule 36)	plantation 2000 nos.		
5d	Total area fully reclaimed & rehabilitated	No proposal	As per proposal	
5e	General remarks of inspecting officer on backfilling, reclamation etc	No area is mined out. Thus there is no proposal for backfilling at present. However, during the year 2021-22, 2756 nos of saplings have been planted in waste dumps near lease boundary.		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals 2021-22	Actual work 2021-22	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23. Details should be given in the format as given in Annexure-20.	Submitted on time.	PMCP submitted of FY 2021-22	Submitted on time.
6b	Management of worked/mined out benches 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	i) Area available for rehabilitation 0 (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year - 2000 iv) Cumulative no. of plants v) Any other specific method of rehabilitation – plantation vi) Cost incurred on watch & care during the year	i) Area available for rehabilitation 0 (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year -2756 iv) Cumulative no. of plants 52544 v) Any other specific method of rehabilitation – plantation vi) Cost incurred on watch & care during the year: Rs 366574	As per proposal.
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	No proposal	No Proposal	No area is mined out. Thus, there is no proposal for backfilling.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No proposal	No Proposal	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposal has been in the approved document for regular monitoring of environmental	Being done as per proposal	All the parameters are within the prescribe

		parameters at core and buffer zone.		d limit
6f	General remarks of inspecting officer on PMCP compliance & progressive	No area is mined out. Thus, there is no proposal for backfilling. However, during the year 2021-22, 2756 saplings have been planted with cumulative plantation of 52544 nos .		

7.0 Mineral Conservation

SN	Item	Proposals 2021-22	Actual work 2021-22	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Direct dispatch of ROM from the lease area to the captive Arasmeta Cement plant	ROM is directly dispatched to cement plant.	As per proposal.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Quality of ROM is controlled by judicious blending procedure practiced in mine	No sorting either manual or mechanical done.	-do-
7c	Different grade of mineral sorted out at mines	Mechanised sorting has been proposed in the approved document before dispatch of the ROM to the captive plan	-do-	-do-
7d	Any beneficiation process at mines	No beneficiation process has been proposed in the approved document during plan period.	No beneficiation done.	-do-
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The run of mine ore after blasting are directly dispatched to captive cement plant without carrying out any manual / mechanical sorting or any kind of beneficiation.		

8.0 Environment

SN	Item	Proposals 2021-22	Actual work 2021-22	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	separate removal of topsoil and its utilization.	Top soil is separately removed and stacked	As per proposal.
8b	Concurrent use or storage of topsoil	concurrent use of topsoil.	Top soil is concurrently used for planation purpose.	-do-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Separate dumping of Topsoil, Overburden,	Separate stacking of top soil and waste being done.	-do-

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Top Soil for plantation	Top soil is being used for plantation purpose.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Nil	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 44)	Cumulative: 12000 nos Proposed during the year : 1000	Cumulative: 122756 During the year: 2756	Plantation has been done in excess of the proposed plantation.
8g	Survival rate	Not mentioned in the approved document	Approx 74	
8h	Water sprinkling on roads to control airborne dust	water sprinkling on roads through water tanker.	Water sprinkling done on haul roads by water tanker	As per proposal.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Top soil and waste dump are separately stacked. 2756 saplings have been planted during the year 2021-22 against proposed plantation of 2000 saplings. Water sprinkling is done as per proposal.		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – Feb 2023 A.R. submitted upto- 2021-22	Submitted on time.

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: Shri Subhransu Sekhar panda Manager- Subhransu Sekhar panda Geologist-Mr Syed Abdul Mannan	Mining Engineer: Shri Subhransu Sekhar panda Manager- Subhransu Sekhar panda Geologist-Mr Syed Abdul Mannan	Both were present during the inspection of the mine.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 14.825 Ha. Waste/reject- 8.07 ha Ha. Occupied by plant, buildings, residential, welfare buildings & roads: 0.880 ha, Other Purpose (Soil Dump and Road: 8.117 ha	Appears to be correct.	
9d	Scrutiny of Annual return on Afforestation	Within ML: 2756 nos , Outside ML: 243	Appears to be correct.	
9e	Scrutiny of Annual return	Nil	No mineral reject	

	on mineral reject generation (Grade & quantity)		stock observed during the visit.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock: ROM: NIL Graded Ore: NIL Closing Stock: ROM: NIL	Appears to be correct.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale Value: NIL Ex-Mine Price: 560.37 Per Metric Tonne Cost of Production: 560.37 Per Metric Tonne	Cost of production is same as ex mine price, since it is a captive mine.	The cost of production appears to be on higher side.
9i	Scrutiny of Annual return on fixed assets	Rs. 173698852	Rs. 173698852	
9k	Scrutiny of Annual return on mining machineries	Backhoe-02, Tipper-12, Dozer-01, Rock drill-01, water tanker-01	Verified from the machinery log books	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

During the previous inspection dated 22.07.2021 by Shri Rajesh Kumar Das, Sr.ACOM , no violation was pointed out.

Details of the Violations Pointed-out during Inspections:

नियम	उल्लंघन के प्रकार का ब्यौरा
11(1)	The mining operations are required to be carried out in accordance with the Mining Plan approved, modified or reviewed by Indian Bureau of Mines. However, the mining operations have not been observed carried out in accordance with Review & updation of Mining Plan approved vide letter No. Janjgir/Lst/Sl.No.- 1262/2020 dated 12.02.2021 for the period from 2021-22 to 2025-26 to the extent indicated below:

(Debadurllav Dash)

Regional Mining Geologist

(Name of the Inspecting Officer and Designation and Date)