

**MCDR Inspection Report 2022-23**

1) Name of Inspecting officer:	Prasant Kumar Sahu
2) Designation	Assistant Mining Engineer
3) Accompanying mine official with designation	Mr. Rajesh Kumar Rathore, Mines Manager
4) Date of Inspection	21.09.2023
5) Date of Previous Inspection	This is the first (01 <sup>st</sup> ) inspection after the opening of the mine i.e. 02 <sup>nd</sup> April 2021.

**I. GENERAL INFORMATION**

Sl.No	Particulars	Details
1	Name of the Mine	Sonadih Limestone Mines (ML-1)
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total lease area : 294.160 Ha. Forest land : NIL Non forest Land : 294.160 Ha.
3	Mine Code	38CHG19005
4	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/378/2011
5	Name of the lessee, Address, phone, email and fax number	M/s. Nuvoco Vistas Corporation Limited Equinox Buisness Park, Tower-3, East Wing, 4th Floor, Off Bandra- Kurla Complex, LBS Road,, Kurla-West, Mumbai-400070 Phone- 02267692595 Fax-07727-72227 Email-rajesh01.singh@nuvoco.com
6	Village	Sonadih
7	Taluka/Mandal	Balodabazar
8	District	Balodabazar – Bhatapara
9	Pin Code	493332
10	State	Chhattisgarh
11	Post office	Raseda
12	Nearest police station	Baloda Bazar
13	Nearest Railway station	Bhatapara
14	Date of Grant of Mining Lease	15 <sup>th</sup> Dec 2020
15	Date of Execution	11 <sup>th</sup> Jan 2021
16	Date of opening of Mine	02 <sup>nd</sup> April 2021
17	Date of first Renewal, if applicable and its period & expiry	Not applicable
18	Date of second Renewal, if applicable and its period & expiry	Not applicable
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	Name : Mr. Jayakumar Krishnaswamy Designation : Managing Director Date of appointment : 01.11.2018 Address : Equinox Business Park (Peninsula Techno Park), Tower 3, East Wing, 4th Floor, Off Bandra-Kurla Complex, LBS Marg, Kurla-West, Mumbai, Maharashtra-400070, Phone : +91 (0) 22 61202628. Email:jayakumar.krishnaswamy@nuvoco.com
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Name : Mr. Arvind Kumar Patil Designation : Sr. Vice President Date of appointment : 10.06.2023 Address : Sonadih Limestone Mines, PO-Raseda, Distt: Balodabazar- Bhatapra, Chhattisgarh-493332, Phone : +91-9214037096 Email:arvindkumar.patil@nuvoco.com
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Name : Mr Rajesh Kumar Rathore Designation : Sr. Manager (Mines) Qualification : M. Tech. (Mining Engineering) Date of appointment : 18.01.2021 Work Experience : >16 years Address : Sonadih Limestone Mines Post-Raseda, Distt: Balodabazar-Bhatapara Chhattisgarh-493332, Phone :+91-7389949550 Email: rajeshkumar.rathore@nuvoco.com
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Name : Mr Rajesh Kumar Rathore Designation : Sr. Manager(Mines) Qualification :M. Tech.(Mining Engineering) Date of appointment :18.01.2021 Work Experience : >16 years Address : Sonadih Limestone Mines, Post-Raseda, Distt: Balodabazar-Bhatapra, Chhattisgarh-493332, Phone :+91-7389949550 Email: rajeshkumar.rathore@nuvoco.com
24	Name of the Geologist , Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Name :Mr. Tapas Ranjan Mahakud Designation : Asst.Manager(Geology) Qualification : Msc. Applied Geology Date of appointment : 04.05.2023 Work Experience :>10 Years Address : Sonadih Limestone Mine, P.O-Raseda,Distt: Balodabazar-Bhatapra, Chhattisgarh-493332, Phone :+91-6372326496 Email: tapasranjan.mahakud@nuvoco.com
25	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55&carrying out their duties as per rule 56&57 of MCDR, 2017.	Yes
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	23.09.2021 (Modification of Mine Plan) BALODAB/CHUP/KHAYO-1293/2021-RAIPUR (2021-22 to 2024-25) No specific condition was mentioned in the approval letter.

27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Not applicable
28	Mineral(s) granted in lease and proved for mining	Limestone
29	Method of Mining(Open cast, Underground)	Open cast
30	Category (Fully Mechanized, Others or Manual)	Fully Mechanized, Category-A
31	Captive/Non-Captive	Captive

## II. SCIENTIFIC MINING

[Data in respect of financial year (2022-23) or cumulative, as applicable]

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
<b>A. EXPLORATION: -</b>				
1a	Backlog of Previous Year	Nil	Nil	
1b	Exploration Over Lease area for Geological Axis 1 or 2	2022-23=07	Nil	29 Nos. boreholes were drilled in FY 2021-22 against the proposal of 27 boreholes during the plan period up to 2024-25. Proposed Boreholes 2021-22- 11 Nos. 2022-23- 07 Nos. 2023-24- 09 Nos. 2024-25- 00 Nos. Total - 27 Nos.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	Not applicable	
1d	Balance area to be explored to bring Geological axis 1 or 2	No proposal	Nil	Entire potential mineralized area has been explored under G1
1e	Balance reserves as on 01/04/2023	Under 111: - 96345056 Tonnes		As per AR submitted for the year 2022-23
1f	General remarks of inspecting officer on geology, exploration etc.	29 Nos. boreholes were drilled in FY 2021-22 against the proposal of 27 boreholes during the plan period up to 2024-25. Entire potential mineralized area has been explored under G1.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
<b>B. DEVELOPMENT: -</b>				
2a	Location of development w.r.t. lease area	Pit No-01 (Block-02) N-2190 to N-2625 E-1140 to E-1425  Pit No-02 (Block-03) N-1350 to N-1550 E-300 to E-700	Carried out within the proposed area	
2b	Separate benches in topsoil, overburden and mineral	Separate benches proposed in OB & mineral.	Separate benches were maintained in OB & mineral.	OB bench-1 Nos. Mineral Bench-2 Nos.
2c	Stripping ratio or ore to OB ratio	1: 0.042	1: 0.074	Ore and OB ratio in tonee/ m3
2d	Quantity of topsoil generation in m3	13851	5500	Utilized for plantation
2e	Quantity of overburden generation in m3	114999	49022	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Production and development were carried out within the proposed area. However, actual development was less in comparison to the proposal. Violation of Rule 11(1) of MCDR,2017 was pointed out for less development and excavation.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
<b>C. EXPLOITATION: -</b>				
3a	Number of Pit Proposed for Production	02	02	
3b	Quantity of ROM mineral production proposed	2727000 tones	654944.30 tones	Less production was reported against the proposal as the production of limestone was commenced from 19.12.2022 only.
3c	Recovery of Sailable/ Usable Mineral from ROM Production	100%	100%	
3d	Quantity of mineral reject generation	272700 tones	Nil	No mineral reject generated
3e	Grade of mineral reject generation and threshold value declared	Not specified	Not applicable	-do-
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	NA	
3h	Manual / Mechanized	Mechanized	Mechanized	Blasted material from

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	method adopted for segregating from ROM			the mines is being fed to the captive cement plant.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal	Not applicable	
3j	Provision of drilling & blasting in mineral benches	Deep hole drilling and Blasting proposed in mineral benches	Deep hole drilling and blasting was carried out in mineral benches as proposed	Drill machine -105/115 mm dia Spacing-4.8 mt., burden-3.5 mt., depth-8 mt. Emulsion explosive in combination with ANFO
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	Bench height- 8 meters Bench width-20 to 25 meters	Not maintained as proposed	Violation under Rule 11(1) of MCDR, 2017 issued for not developing/maintaining pit/quarry in systematic manner by formation of regular benches of 8 m height and 20-25 m width as envisaged in the approved Mining Plan.
3m	Total area covered under excavation/pits	41.41Ha. up to the end of the plan period FY: 2024-25	2.89 Ha. up to the end of FY: 2022-23	
3n	Ore to OB ratio for the pit/mine during the year	1: 0.042	1: 0.074	Ore and OB ratio in tonee/ m3
3o	Total area put in use under different heads at the end of year	59.05 Ha. up to the end of the plan period FY: 2024-25	3.920 Ha. up to the end of FY: 2022-23	
3p	Production of ROM mineral during last five-year period, as applicable	2021-22: 513000 2022-23: 2727000	2021-22: 00.00 2022-23: 654944.30	As per the Annual Return submitted.
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 was reported against the proposal as the production of limestone was commenced from 19.12.2022 only.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
<b>D. SOLID WASTE MANAGEMENT: -</b>				
4a	Separate Dumping of Topsoil, OB and Mineral Rejects	Separate dumping of Waste/OB proposed	No separate dumping was done	All the OB and topsoil generated has been disposed of in the periphery of the mine boundary

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4b	Location of Topsoil, OB and Mineral Rejects Dumps	E=622775, E=622999 N=2404461, N=2404684	No dumping was carried out	
4c	Number of Dumps within Lease & Outside Lease area	WML: OB dump –Two dumps including one temporary dump, OML- Nil	No dumping was carried out	
4d	Location of Dumps, within Ultimate Pit Limit	Proposed beyond Ultimate Pit Limit	No dumping was carried out	
4e	Number of Active & Alive Dumps	02	No dumping was carried out	
4f	No of Dead Dumps	-	Nil	No dead dump observed
4g	No of Dumps Established	-	Nil	
4h	Whether Retaining Wall or Garland drain along Dumps are there	No Proposal	Nil	
4i	Length of Retaining Wall or Garland drain along Dumps	No Proposal	Nil	
4j	No. of Settling tanks	No Proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management	All the OB and topsoil generated during the year have been disposed of in the periphery of the mine boundary.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
<b>E. SOLID WASTE MANAGEMENT: -</b>				
5a	Status of part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil	No area has been exhausted fully for carrying out backfilling
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	No proposal	Not applicable	
5d	Total area fully reclaimed and rehabilitated	No proposal	Not applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Mineral has not been exhausted fully & thus no proposal was given for backfilling.		

Sl. No	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
<b>F. PROGRESSIVE MINE CLOSURE PLAN: -</b>				
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 27.06.2023
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	No proposal No proposal No proposal No proposal No proposal No proposal	Nil Nil Nil Nil Nil Nil	No area is mined out fully at present
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	i)No Proposal ii)No Proposal iii)No Proposal iv)No Proposal v)No Proposal	i)Nil ii)Nil iii)Nil iv)Nil v)Nil	No area has got matured for reclamation and rehabilitation purpose
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	(i) No proposal (ii)No proposal (iii)No proposal	(i)Nil (ii) Nil (iii) Nil	No wasteland available within the lease
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring of air, water & noise proposed	Environmental monitoring of air, water & noise was carried out as per the proposal	All values of environment parameters were within permissible limits
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Annual PMCP report has been submitted. Plantation has been carried out at the northern side of the lease area (Block-02).		





	inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in & around the mine area was good.
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Sl. No	Item	Comments		Remarks
<b>I. COMPLIANCE OF RULE-45: -</b>				
9a	Status of Submission of Monthly & Annual Returns	MR being regularly submitted AR submitted up to 2022-23		
Sl. No	Item	Details Given in A.R	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager- Mr. Rajesh Kumar Rathore Mining Engineer- Mr. Rajesh Kumar Rathore Geologist-Mr. Nilanjan Sinha	Employed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	2.890 Ha.	About 2.890 Ha.	
9d	Scrutiny of Annual return on afforestation	Plantation Done: WML: 6000 @ 80% survival rate OML: 16000 @ 80% survival rate	Plantation Done: WML: 6000 @ 80% survival rate OML: 16000 @ 80% survival rate	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex mine Price- Rs 322.56/ton Production cost- Rs 322.56 /ton	Captive consumptions	
9i	Scrutiny of Annual return on fixed assets	Rs.4671571561.00 including land, building and machinery, Plant and Machinery including transport equipment	Appears to be correct	
9k	Scrutiny of Annual return on mining machineries	Shovel/Excavator – 3 Nos. Dumper /Tippers -11 Nos. Drill machine -2 Nos. Dozer- 1 Nos.	Observed deployed	

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

Date: - 06.03.2024

प्रशान्त कुमार साहू / Prasant Kumar Sahu  
सहायक खनन अभियंता / Assistant Mining Engineer  
भारतीय खान ब्यूरो, रायपुर/ Indian Bureau of Mines, Raipur  
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