

MCDR INSPECTION REPORT**1.0 GENERAL**

SN	Particulars	Details
1	Name of inspecting officer & designation	Rajesh Kumar Das Sr Assistant Controller of Mines
2	Accompanying Mine Official with Designation	Ritesh Kaimal DGM (mines)
3	Date of inspection	16/02/2021
4	Name of the Mine	Chilhati Limestone Mine
5	Total Lease Area (Ha) with breakup of Non-forest and forest land	1085.365 Hectare Private Land-996.956 ha Government Land-88.409ha Forest Land -Nil
6	Mine Code	38CHG02002
7	IBM Registration Number under rule 45 of MCDR, 1988	IBM/378/2011
8	Name of the lessee, Address, phone, email and fax number	Nuvoco Vistas Corporation Ltd Arasmeta Cement Plant , Post office Gopalnagar, Tehsil- Akaltra, ,District- Janjgir,-Champa ,Chhattisgarh, Pin: 465663,Phone : 9893019619 ritesh.kaimal@nuvoco.com
9	Village	Chilhati
10	Taluka / Mandal / District	Pachpedi /Masturi /Bilaspur
11	State	Chhattisgarh
12	Post office & PIN	495551
13	Nearest police station	Pachpedi
14	Nearest Railway station	Bilaspur
15	Date of Grant of Mining Lease	13/07/2015
16	Date of Execution	Mining Lease Execution on 22/12/2015 for 50 years from 15/12/2015 to 14/12/2065
17	Date of opening of Mine	19/04/2017
18	Date of first Renewal, if applicable and its period & expiry	NA
19	Date of second Renewal, if applicable and its period & expiry	NA
20	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
21	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Jayakumar Krishnaswamy Equinox Business Park, Tower -3, East Wing, 4th Floor Off Bandra –Kurla Complex, LBS RoadKurla –West Mumbai-400070 Tel 022-66306511, Fax- 022-66306510 jayakumar.krishnaswamy@nuvoco.com Date of appointment : 01.11.2018
22	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Raghavendrarao Jahagirdar Arasmeta Cement Plant , Post office Gopalnagar, Tehsil- Akaltra, ,District- Janjgir,-Champa ,Chhattisgarh, Pin: 465663 Phone : 8003090425 raghavendrarao.jahagirdar@nuvoco.com Date of appointment : 01/07/2020

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23	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Narayan Nahak Arasmeta Cement Plant , Post office Gopalnagar, Tehsil- Akaltra, ,District- Janjgir,-Champa ,Chhattisgarh, Pin: 465663,Phone : 9893019615, narayan.nahak@nuvoco.com Date of Appointment 01/08/2020
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24	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Narayan Nahak AMIE (MINING) , 24 years Arasmeta Cement Plant , Post office Gopalnagar, Tehsil- Akaltra, ,District- Janjgir,-Champa ,Chhattisgarh, Pin: 465663,Phone : 9893019615 narayan.nahak@nuvoco.com Date of Appointment 01/08/2020
25	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Shri Shambhu Pal (Geologist) M.Tech In Applied Geology, Exp 11 years Date of Appointment 17/11/2020
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	BLS/LST/1221/2019/RAIPUR/545 dt 11.12.2019 For Period 2020-21 to 2024-25.
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Review of Mining Plan approved letter no.BLS/LST/MPLN-1221/RPR dated 11/12/2019 for period 2020-21 to 2024-25.
28	Mineral(s) granted in lease and proved for mining	Limestone
29	Method of Mining(Opencast, Underground)	Opencast
30	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
31	Captive/Non Captive	Captive
32	Existing EC Limit and validity	4 MTPA Limestone
33	Status of Financial Assurance as per rule 27 of MCDR, 2017	Amount of Financial Assurance Rs. 19746000 submitted the financial assurance -As per rule 27 of MCDR 2017, bank guarantee no I3940100012108 dated 18-12-2019 valid upto 31/03/2025.

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

1.0 Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Proposal 79 Bore holes	Bore hole no 33 and meterage 948 meter	
1b	Exploration over lease area for Geological axis 1 or 2.	The proposal is given broadly to cover entire lease area mineralise zone in G1	Broadly 90% mineralised area is covered in G1 & G2 category	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	GEM consultant Bilaspur cost Rs 1873138/-		

1d	Balance area to be explored to bring Geological axis in 1 or 2	The proposal is given broadly to cover entire lease area mineralise zone in G1	Broadly 90% mineralised area is covered in G1 & G2 category	
1e	Balance reserves as on 01.04.2020 (in Million Tonnes)	Under (122): 109.49 Million Tonnes Under (222): 340.423 Million Tonnes	Under (122): 119.53 Million Under (222): 340.423 Million Tonnes	
1f	General remarks of inspecting officer on geology, exploration etc.	Reserve at the starting of mining plan under cat 122-120.07 million tonnes and Production proposed for first five years period in Million Tonnes is 10.58 million tonnes but actual production 0.5393 million tonnes. As mentioned broadly 90% of lease area explored under G1 & G2.		

2.0 Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	Local Co-ordinate E 21793.302 to E 22475.31 and N 11980.524 and 11472.78	Broadly within proposed area	
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	Separate bench of Limestone and soil	As per proposal	
2c	Stripping ratio or ore to OB ratio	1:0.13	1:0.36	
2d	Quantity of topsoil generation in m3	523185	158287	
2e	Quantity of overburden generation in tonnes	NIL	Nil	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The development and production are less w.r.t. proposal given.		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Single pit	Single pit	
3b	Quantity of ROM mineral production proposed	3992813	289563	
3c	Recovery of salable/usable mineral from ROM production	100%	100%	ROM dispatch from mine
3d	Quantity of mineral reject generation	No mineral reject will be generated during MMP Period.	Not applicable.	
3e	Grade of mineral reject generation and threshold value declared	Not mentioned in the approved document	Not applicable.	
3f	Quantity of sub-grade mineral generation	No mineral sub-grade will be Generated during	Not applicable.	

		MMP Period.		
3g	Grade of sub-grade mineral generation	Not mentioned in the approved document	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Not applicable.	Not applicable.	
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 applicable.	
3j	Provision of drilling & blasting in mineral benches	Yes	Being done per proposal.	
3k	Provision of mining machineries in mineral benches	Yes	Being done per proposal.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Soil 2-3 meter, Limestone 8 meter	Soil avg 2-3 meter, Limestone 5-7 meter	
3m	Total area covered under excavation/pits	28.32 Ha	6.211 Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.13	1:0.55	
3o	Total area put in use under different heads at the end of year	Pit- Waste/reject- Others-		
3p	Production of ROM mineral during last five-year period, as applicable (in Metric Tonnes)	Yr- 2015-16: 656250 Metric Tonnes Yr- 2016-17: 1378125 Metric Tonnes Yr- 2017-18: 1715625 Metric Tonnes Yr- 2018-19: 2842188 Metric Tonnes Yr- 2019-20: 3992813 Metric Tonnes	Yr- 2015-16: 0.00 Metric Tonnes Yr- 2016-17: 0.00 Metric Tonnes Yr- 2017-18: 38539 Metric Tonnes Yr- 2018-19: 211201 Metric Tonnes Yr- 2019-20: 289563.360 Metric Tonnes	
3q	General remarks of inspecting officer on method of mining etc.	The method of mining is by opencast method using HEMM and broadly as per proposal.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	1	1	
4b	Location of topsoil, OB dumps (Range in UTM/Local Coordinate/Plot	Local co-ordinate E21879.41 to E22137.42 and	Broadly within proposed area	

	No./Location)	N12621.72 to N12332.20		
4c	Number of dumps within lease area and outside lease area	With in lease area 1	With in lease area 1	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	Local co-ordinate E21879.41 to E22137.42 and N12621.72 to N12332.20	Broadly within proposed area	
4e	Number of active & alive dumps	1	1	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilised	1	1	
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		150mX2mX3m 312mX2mX3m	
4j	Number of settling ponds	1	1	
4k	Specific comments of inspecting officer on waste dump management	Broadly as proposal		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	NA	
5b	Area under backfilling of mined out area	No proposal	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	No proposal	NA	
5d	Total area fully reclaimed & rehabilitated	No proposal	Not applicable.	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Area not matured for backfilling.		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	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.	The given Information has been cross verified.	

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	Not mentioned in the approved Document	Being done 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	Not mentioned in the approved document	Being done as per proposal.	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	By Plantation 3750 nos	Plantation 3800	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposal has been in the approved document for regular monitoring of environmental parameters at core and buffer zone.	Being done as per proposal.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Broadly as per proposal		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral will directly be dispatched from the lease area to the captive plant	Being done as per proposal.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No sorting proposed within lease	NA	
7c	Different grade of mineral sorted out at mines	NA	NA	
7d	Any beneficiation process at mines	No beneficiation process has been proposed in the approved plan during plan period	NA	

7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	ROM is directly dispatch to plant as there is no crushing and screening unit in lease area.
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8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	Proposal has been given in the approved for separate removal of soil and its utilization	Being done as per proposal.	as
8b	Concurrent use or storage of topsoil	Proposal has been given in the approved document for concurrent use of topsoil.	Being done as per proposal.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Separate dumping of Topsoil; have been proposed in the approved document.	Being done as per proposal and mostly used for afforestation.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	Being done as per proposal.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposal has not been given in the approved document for reclamation during plan period	Being done as per proposal.	
8f	Baseline information on existence of plantation & additional plantation done (Rule 44)	2019-20: 3750 nos Saplings will be planted.	2019-20 : 3800 nos.saplings planted	
8g	Survival rate	Not mentioned in the approved document	70%	
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	Being done per proposal.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	The lessee is taking care of all environmental preventive measures as per statute i.e Air, Water, Noise, ground vibration monitoring. The plantation is done and dust suppression water sprinkling is done on regular basis. There is no adverse impact observed during mine visit on aesthetic beauty in and around mines area.		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – Jan-2021 A.R. submitted upto- 2019-20 (FY2019-20)	

S. N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
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9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer & Manager: Shri Sanjay Dwivedi	Mining Engineer & Manager: Shri Naryan Nahak Geologist – Shambhu pal	New appointment
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Current working 6.211 Ha	Current working 6.211 Ha	
9d	Scrutiny of Annual return on Afforestation	With in lease area 3800 nos	With in lease area 3800 nos	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NA	Na	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock: ROM: NIL Graded Ore: NIL	Closing Stock: ROM: NIL Graded Ore: NIL	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-Mine Price & Cost of Production: 315.33 Per Metric Tonne	Ex-Mine Price & Cost of Production: 315.33 Per Metric Tonne	
9i	Scrutiny of Annual return on fixed assets	Rs. 766303360/-		
9k	Scrutiny of Annual return on mining machineries	Given in the annual returns		

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

Date of Last Inspection, Name and Designation of the Inspecting Officer:

R N Mishra, Sr. Mining Geologist, Indian Bureau of Mines, Raipur 13/09/2019 and the violation of Rule 55 pointed out taken compliance.

Details of the Violations Pointed-out during Inspections:

Rule	Nature of Violation observed
11(1)	Mining operations should have been undertaken in accordance with the approved Mining Plan/Scheme of Mining. The Mining Plan was approved vide letter no.राय/चूना/खयो-988/नाग/2015/38-रायपुर dated 05.08.2016 and following deviation was observed during inspection 1. It was proposed to to drill 79 holes in 2018-19 but only 33 boreholes drilled. 2. It was proposed to produce 3992813 MT of limestone for the year 2018-19 but only 289563 MT produce which is 7% of the proposal.
37(2)	The dumps shall be properly secured to prevent escape of material there from in harmful quantities which may cause degradation of environment and to prevent causation of floods. It was observed that there is no proper terracing and the OB/waste dump is near to lease boundary and some place extended in 7.5 meter safety barrier zone but still no proper retaining wall is constructed nor any control measures taken for dump stability.

(Rajesh Kumar Das, Senior Assistant Controller of Mines)