

File No: CHG/DRG/LST-8/RPR**MCDR INSPECTION REPORT****General**

S N	Particulars	Details
1	File no	CHG/DRG/LST-8/RPR
2	Name of the Mine	Nandini Khundini Lime Stone Mine
3	Total Lease Area (Ha) with breakup of Non-forest and forest land	Non forest land:-6.46 Ha Forest Land:- Nil Total lease area:- 6.46 Ha
4	Mine code	38MPR13041
5	Date of Inspection	17 August 2022
6	Name of official accompanying inspection	Shri Arun Kumar Gadatia, Assistant Mining Engineer, IBM, Raipur Accompanying with Shri Gamliel Kachhap (Mines Manager)
7	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5683/2011
8	Name of the lessee, Address, phone, email and fax number	Shri Hemant Kumar Sahu S/o Shri Jageswar Sahu Village:- Chikhali, PO:- Jewara Sirsa Distt:- Durg (Chhattisgarh) – 491001 Phone: +91(0) 9424100567 Email:- hksdurg@gmail.com
9	Village	Nandini Khundini
10	Taluka/Mandal	Dhamdha
11	District	Durg
12	Pincode	490036
13	State	Chhattisgarh
14	Post office	Nandini Khundini
15	Nearest police station	Nandini Nagar
16	Nearest Railway station	Bhilai Power House
17	Date of Grant of Mining Lease	26/11/1980 to 25/11/1990 (10 years)
	Renewed for further 10 years	From 26/11/1990 to 25/11/2000 Lease transferred to Shri Hemant Kumar Sahu on 02/01/1999 Mining operation started after the transferred on October 2000.
18	Date of Execution	26/11/1980
19	Weekly day of rest	Sunday
20	Date of opening of Mine	26/11/1980
22	Date of first Renewal, if applicable and its period & expiry	26/11/1990 to 25/11/2000 (10 Years)
21	Date of second Renewal, if applicable and its period & expiry	26/11/2000 to 25/11/2010 (10 Years) 26/11/2010 to 25/11/2020 (10 Years) 26/11/2020 (Expiry-25/11/2030)- 10 Year
23	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Lease has been transferred from M/s Chopra Construction to Shri Hemant Kumar Sahu on 02/01/1999 Supplymentary lease deed executed from 26/11/2020
24	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Hemant Kumar Sahu Village- Chikhali, Po- Jevera Sirsa, Distt- Durg (C.G.) – 491001 Tel: 0942400567 Email:- hksdurg@gmail.com

25	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Not appointed.
26	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Gamliel Kachhap, Amlidih Raipur (C.G.) Mob No- 8770175338 Email ID- gamlielkachhap@gmail.com Date of appointment:- 01/09/2014
27	Name of the Mining Engineer & Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Gamliel Kachhap (Mining Engineer) B.E (Mining), experience- 20 Years Mo No – 8770175338 Address – Amlidih Raipur (C.G.) Email ID – gamlielkachhap@gmail.com Shri Naveen Kumar Tamrakar (Geologist) M.Sc(Geologist) Mo No – 9516841535 Address – Geosolutions (P)Ltd. HIG-21,Hudco Colony,Bhilai, Distt- Durg (C.G.) Email ID – geosolutions@rediffmail.com geosolutions2004@gmail.com
28	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes Appointed
29	Date of Approval of Review of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan approved vide letter no DRG/LST/MPLN-86/NGP Nagpur dated 06/07/2001, Proposal Period:- 2001-02 to 2005-06 Modified Mining Plan approved vide letter no.DRG/LST/MPLN-1084/2017-RPR Raipur dated 15/05/2017, Proposal Period:- 2017-18 to 2020-21 LeasePeriod:- 2016-17 (01 Year)
30	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 approved vide letter no DRG/LST/MPLN-86/NGP Nagpur dated 17/02/2009, Proposal Period:- 2006-07 to 2010-11 Scheme of Mining approved vide letter no DRG/LST/MPLN-86/NGP Nagpur dated 31/10/2012, Proposal Period:- 2011-12 to 2015-16 Review of Mining Plan approved vide letter no DRG/LST/MPLN-1274/2020-Raipur, dated 20/05/2021, Proposal Period:- 2021-22 to 2025-26
31	Mineral(s) granted in lease and proved for mining	Lime Stone
32	Method of Mining(Open cast, Underground)	Open cast
33	Category (Fully Mechanised, Others or Manual)	Category-A, Fully Mechanised
33	Captive/Non Captive	Non Captive Mine
34	Present EC Status	60,00 Tonne per Annum
35	Status of Financial Assurance	Rs. 10,00,000/- vide Bank Guarantee number 734GT01220290001, dated 29/01/2022 valid upto 28/01/2027

Scientific Mining: Compliance of proposals of approved mining plan/Review of mining.

1.0 Exploration

S.N.	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
1a	Backlog of previous year	No proposal	Not Applicable	No comments
1b	Exploration over lease area for Geological axis 1 or 2.	G-1 :- 6.46 Ha	G-1 :- 6.46 Ha	Entire area of 6.46 ha has been explored under G1 category.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not specified	By Lessee	Through Government Agency (Per Year)
1d	Balance area to be explored to bring Geological axis in 1 or 2	The entire area has been explored in G1 level	Not Applicable	Entire lease area of 6.46 Ha. has been explored under G1 category.
1e	Balance reserves as on 01.04.2021	Under (111): 12,40,342 Tonne Under (211): 14,16,500 Tonne	Under (111): 12,40,342 Tonne Under (211): 14,16,500 Tonne	As per proposal.
1f	General remarks of inspecting Officer on geology, exploration etc.	The entire lease area of 6.46 Ha explored under G1 category.		

2.0 Development

S.N.	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
2a	Location of development w.r.t. lease area	Eastern side of the area.	Within the working pit.	No additional development was carried out due to working in further depth is not possible.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Top Soil:- Nil Over burden:- Nil Mineral/Ore:- 04 Nos	Separate benches maintained in top soil, OB & Mineral	No comments.
2c	Stripping ratio or ore to OB ratio	1.5	Nil	The production of limestone depends on market demand as C&S plant could not be dismantled.
2d	Quantity of top soil generation in m ³	Not proposed	Not applicable	No top soil generated during the plan period.
2e	Quantity of overburden/waste generation in m ³	Nil	Not applicable	No additional development

			was carried out.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The actual development is less in comparison to proposal for lack of market demand.	

3.0 Exploitation

S.N.	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
3a	Number of pits proposed for production	01	01	As per proposed
3b	Quantity of Limestone production proposed	32,400.00 Tonne	3264.00 Tonne	Not mentioned why less production in Annual Return 2021-22
3c	Recovery of salable/usable mineral from ROM production	32400.00	Nil	No Comments
3d	Quantity of mineral reject generation	Not mentioned in approved Mining Plan	Not applicable	No Comments
3e	Grade of mineral reject generation and threshold value declared	Not mentioned in approved Mining Plan	Not Applicable	No generation of mineral reject.
3f	Quantity of sub-grade mineral generation	Not mentioned in approved Mining Plan	Nil	No generation of sub-grade mineral reject.
3g	Grade of sub-grade mineral generation	CaO<34% MgO>4%	CaO<34% MgO>4%	No comments.
3h	Manual / Mechanised method adopted for segregating from ROM	Not proposed within lease area	Nil	No processing proposed
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No beneficiation study reported.	No such report carried out.	Not required for limestone mineral.
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	Yes done during the year
3k	Provision of mining machineries in mineral benches	Drilling machine-01 DTH Drilling machine with 80 mm dia Excavator -01- 1.250 cum bucket capacity (Hydraulic shovel) Dumper 02 nos:- of 10.000 Tonne Rock Breaker – 01 Tipper – 03 Water tanker – 01 (10,000 litres) Electric water pump – 02 nos (05 HP each) For dewatering electric pump:- 01 no of 40 HP (CSR Activity) Jeep/Pool car- 01 no	Yes, observed in mine.	Used as per proposal.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height in mineral proposed for 6 meter	Height in mineral benches not as per proposal.	The deviation for not maintained during COVID period as mine was closed.
3m	Total area covered under excavation/pits	5.680 Ha.	5.680 Ha.	Working within proposed area.
3n	Ore to OB ratio for the pit/mine during the year	1:5	Nil	No generation of Over Burden.
3o	Total area put in use under different heads at the end of year	Pit:- 5.680 Ha Reclaimed/Rehabilitated:- 0.074 Ha Occupied by plant, buildings, residential, welfare building & roads:- 0.125 Ha. Others:- 0.0 Ha (upto end of plan period)	Pit:- 5.680 Ha Reclaimed/Rehabilitated:- 0.074 Ha Occupied by plant, buildings, residential, welfare building & roads:- 0.125 Ha. Others:- 0.0 Ha (upto end of plan period)	Working within proposed area.
3p	Production of ROM mineral during last five-year period, as applicable (Tonne)	(2017-18) – 32,475 Tonne (2018-19) – 32,475 Tonne (2019-20) – 32,475 Tonne (2020-21) - 32,475 Tonne (2021-22) – 32,400 Tonne	6,573 Tonne 2,577 Tonne 1,993 Tonne 2,809 Tonne 3,264 Tonne	Actual production within proposed limit.
3q	General remarks of inspecting officer on method of mining etc.	Mining operation is in low scale. The production is less in comparison to proposal due to lack of market demand. The production of limestone depends on market demand as well as C&S plant could not be dismantled.		

4.0 Solid Waste Management-Dumping

S.N.	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Not envisaged in the approved document.	Not Applicable	No top soil & Over burden generated during the year.
4b	Location of topsoil, OB & mineral reject dumps	Nil	Not Applicable	-do-
4c	Number of dumps within lease area and outside lease area	Nil	Not Applicable	-do-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Nil	Not Applicable	No dump have been observed within lease area.
4e	Number of active & alive dumps	Nil	Not Applicable	-do-
4f	Number of dead dumps	Nil	Nil	No dead dump observed within lease area.
4g	Number of dumps stabilised	Nil	Not applicable	No dump have been observed within lease area.
4h	Whether Retaining wall or garland drain all along dumps are there	Nil	Nil	No comments
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	-do-
4j	Number of settling ponds	Nil	Nil	-do-

4k	Specific comments of inspecting officer on waste dump management	No top soil and over burden generated during the year as the mining operation restricted to mineral zone only.
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5.0 Solid Waste Management-Backfilling

S.N.	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	Proposal for full extraction of mineral/ore has been given before conceptual pit limit.	Not applicable as on date.	Area is not matured for back filling.
5b	Area under backfilling of mined out area	Not proposed in the approved document.	Nil	Mineral has not been completely mined out from the quarry.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	0.254 Ha	0.074 Ha	As per proposed
5d	Total area fully reclaimed & rehabilitated	0.254 Ha	0.074 Ha	-do-
5e	General remarks of inspecting officer on backfilling, reclamation etc	0.074 Ha proposal for backfilling & reclamation.		

6.0 Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	As per 26(2) Of MCDR 2017 the annual report has to be submitted	Submitted, but not in format	Violation pointed out under Rule 26(2) of MCDR, 2017.
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	50 nos	50 nos	Survival rate is 60%
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L * B * 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	Nil	No area is matured for backfilling.

6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	50 nos	50 nos	Survival rate is 60%
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed environmental monitoring in core & buffer zone.	Environmental monitoring is carried out.	By Government Agency (Once in year).
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	PMCP report has not been submitted for the financial year in format.		

7.0 Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Mechanised crushed and sorted ore/mineral will be dispatched.	Being done as per proposal.	Done as proposed.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanised crushing & screening.	Being done as per proposal.	Done as proposed.
7c	Different grade of mineral sorted out at mines	Not proposed	Not Applicable.	No comments.
7d	Any beneficiation process at mines	Mechanised crushing & screening.	Being done as per proposal.	Done as proposed.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The excavated run of mine is being feed to the crushing and screening plant for size reduction i.e, 40 mm, 20 mm, 6 mm & -6 mm. A crushing unit of 200 TPD capacity has already been installed in the lease area. During the plan period , this crushing unit will be dismantled and shifted outside the lease area.		

8.0 Environment

S.N.	Item	Proposals (2021-22)	Actual work (2021-22)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Not Applicable	The entire development has been done within mineral zone.
8b	Concurrent use or storage of topsoil	No proposal	Not Applicable	No generation of top soil.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	Not Applicable	No comments
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not Applicable	No comments
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not Applicable	No area matured for reclamation.
8f	Baseline information on	50 Nos	50 Nos	Survival rate is

	existence of plantation & additional plantation done (Rule 41)			60 %.
8g	Survival rate	No proposal	60%	As per Annual Return.
8h	Water sprinkling on roads to control airborne dust	Yes proposed	Yes	Water tanker deployed to control airborne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	No adverse impact observed on aesthetic beauty in and around mine area.		

9.0 Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return- upto August 2022 Annual Return- upto 2021-22		Submitted within time.
S.N.	Item	Proposal (2021-22)	Observation of I/Officer (2021-22)	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mine Manager: Yes Mining Engineer: Shri Gamliel Kachhap Mining Geologist: Shri Naveen Tamrakar	Present	As per mentioned in Annual Return.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 5.680 Ha Already exploited & abandoned by opencast mining- 0.585 Ha Reclaimed/Rehabilitated- 0.074 Ha Others- 0.125 Ha	Pit- 5.680 Ha Already exploited & abandoned by opencast mining- 0.585 Ha Reclaimed/Rehabilitated- 0.074 Ha Others- 0.125 Ha	As per mentioned in Annual Return.
9d	Scrutiny of Annual return on afforestation	50 nos	50 nos	Survival rate is 60 %.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	No rejects found in the mine.	Not envisaged in approved document.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock: 17971 ROM Production-3264 Dispatch- Nil Closing Stock: 21235	Stock is reportedly temporarily stacked at crushing and screening plant..	As per mentioned in Annual Return.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex. Mine price- Rs/- 534.00 Cost of production - Rs/-400	Ex. Mine price- Rs/- 534.00 Cost of production - Rs/-400	-do-
9h	Scrutiny of Annual return on fixed assets	Rs/- 50,000	In respect of the mine, beneficiation plant, mine work shop, power and water installation	-do-
9i	Scrutiny of Annual return on mining machineries	Tipper- 03 Other HEMM machinery – 01 drill machinery - 01 water tanker - 01 Drilling machine-01	Yes, observed in mine.	Used as per proposal.

		DTH Drilling machine with 80 mm dia Excavator -01- 1.250 cum bucket capacity (Hydraulic shovel) Dumper 02 nos:- of 10.000 Tonne Rock Breaker – 01 Tipper – 03 Water tanker – 01 (10,000 litres) Electric water pump – 02 nos (05 HP each) For dewatering electric pump:- 01 no of 40 HP (CSR Activity) Jeep/Pool car- 01 no		
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10.0 Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

Star rating validated and found to be four star for the year 2021-22. Earlier violation under Rules 11(1), 26(2), 45(5)(b)(i), 45(5)(c)(i), 35(4), 26(2), 45(5)(C) and 46 of MCDR, 2017 has been rectified on 15/02/2022 & 28/02/2022.

Cost of major mining head per tones as given below.

Sn	Items	Cost Rs/T of Limestone	Cost Rs/T of Total material handling
1	Loading Cost	30 Rs MT.	Total Production
2	Transportation Cost	30 Rs MT.	3,264 MT
3	Blasting Cost	55 Rs MT.	
4	Drilling Cost	50 Rs MT.	

11- CSR work

sr	Item	Amount	Remarks
1	Water storage tanks, supply & irrigation support	20,000/- Rs	No comments
2	Support to health & medical services , covid assistance	5,000/- Rs	-do-
3	Promotion of Hygiene and sanitation , public health	5,000/- Rs	-do-
4	Support to skill development	5,000/-Rs	-do-
5	Social livelihood support	15,000/- Rs	-do-
6	Support to transportation and services	20,000/- Rs	-do-
7	Others	Nil	Nil

12. Date of Last Inspection, Name and Designation of the Inspecting Officer: Date of last inspection on 13/11/2021 on basis of MCDR inspection by Shri Prasant Kumar Sahu, Assistant Mining Engineer, and the violation of Rules 11(1), 26(2), 45(5)(b)(i), 45(5)(c)(i), 35(4), 26(2), 45(5)(C) and 46 of MCDR, 2017 was pointed out. The violation have been rectified on 15.02.2022 & 28.02.2022.

13. During inspection the violation is found : During the current inspection violation of Rule 26(2) is pointed out.

(Name of the inspecting Officer)

Date: 15-09-2022

**Arun Kumar Gadatia
Asstt. Mining Engineer
Raipur Regional office**